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PLANNING & ZONING
METROPOLITAN PLANNING SECT

Doral Crossing

**Site Assessment for Property at
N.W. 41st Street and Florida Turnpike**

Prepared by:

EAS Engineering, Inc.
55 Almeria Avenue
Coral Gables, Florida 33134

June 26, 2013

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INTRODUCTION

The subject property consists of two parcels of land located immediately west of the Homestead Extension of the Florida Turnpike. The north parcel is located north of N.W. 41st Street in Section 24, Township 53 South, Range 39 East, Miami-Dade County, Florida (Figure 1). The second parcel is located south of N.W. 41st Street, in Section 25, Township 53 South, Range 39 East, Miami-Dade County, Florida (Figure 1). This property is being considered for development.

This report presents the results of a site assessment and wetland delineation conducted by EAS Engineering on May 31, 2013

WETLAND DELINEATION

The distinction between uplands and wetlands is based on three criteria:

Vegetation can be classified into different categories based on its ability to thrive in water or in wet soil. The classes (for the State of Florida) include:

- Obligate (OBL) plants thrive only in wet (anaerobic) soils or in water
- Facultative-Wet (FACW) plants are more likely to be found in wet soils, but can also be found in dry sites
- Facultative (FAC) plants can thrive in either wet or dry conditions.
- Upland (UPL) plants cannot thrive in wet soil. They are associated with dry soils only.

Soils can be divided into:

- Hydric soils, which are flooded or saturated long enough to produce anaerobic conditions that favor the growth of hydrophytic vegetation.
- Non-hydric soils are all other soils. They are aerobic and infrequently flooded.

Wetland Hydrology refers to the characteristics of soils that are flooded or saturated long enough to produce anaerobic conditions. A number of “hydrologic indicators” have been identified to help one identify soils that have been flooded, even if they are dry at the time of inspection. Examples include:

- Drift lines
- Water marks on tree trunks
- Buttressed tree trunks
- Algal mats
- Adventitious roots
- Vegetated tussocks or hummocks
- Evidence of aquatic fauna (crayfish burrows, cast skins of insect larvae)

The State of Florida requires that two of these three characteristics be present for a determination that a wetland condition exists. Miami-Dade County uses the same wetland definition as the State. The Corps of Engineers requires that all three characteristics be demonstrated.

HISTORIC INFORMATION SOURCES

Lakebelt Vegetation Map:

The subject properties were included in the Lakebelt Vegetation Mapping Study that EAS Engineering conducted for Miami-Dade County in 1996. Figure 2 shows the mapped cover types on the subject site, which were based on 1992 aerial photographs. The cover types in the vicinity of this project included:

AG	Agriculture
C	Canals
D	Disturbed Areas
DM	Dense Melaleuca Forest
DV	Developed Areas
FPL	FPL Right-of-Way
L	Lakes
LP	Lake Perimeter
P75	Prairie with 50% to 75% Melaleuca
W	Other Water

These cover types do not denote whether the lands are uplands or wetlands, but they do provide an indication of the likelihood that they contain wetlands. Agricultural lands, for example, could include both uplands and wetlands. Prairie with Melaleuca and Dense Melaleuca normally a wetland cover types. Disturbed Areas are not necessarily uplands, but Developed Areas and Lake Perimeter usually are uplands. The FPL Right-of-Way was wetland throughout most of its length in the Lakebelt.

National Wetland Inventory:

Another good source of historic information is the National Wetland Inventory, published in 1991 and based on 1984 aerial photography (Figure 3). The lake in the southern property is designated as "PUBHx" (Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated). All of the remaining land in both parcels is designated as fresh water wetlands with emergent and scrub/shrub vegetation (PEM1/SS3A – Palustrine, Emergent, Persistent/Scrub Shrub, Broad-Leaved Evergreen, Temporarily Flooded). The quarry to the north of the northern parcel is designated as Lake (L1UBHx – Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated). All of these designations are wetland designations. The National Wetland Inventory did not designate any upland property on either parcel.

SITE ASSESSMENT

Current Use of the Sites:

North Parcel

The parcel north of NW 41st St. is mostly filled upland south of an existing quarry. The subject parcel was previously used to process recycled mulch. That operation has shut down and the site has now been densely overgrown with vegetation. It does not appear that this property is currently being used for anything. The eastern half of the fill pad is elevated about ten feet higher than the adjacent grade. Tall berms exist along the south edge of the quarry and along NW 41st Street. The quarry edge is a steep drop, with no littoral or wetland edge on the south side.

South Parcel

Most of the south site is currently being used for pasture. An entrance road on NW 41st Street (Figure 1) leads to a gravel covered parking area that provides access to a trailer and an array of pens in which are kept pigs, chickens, pea fowl and goats. Farther to the south along this road is a small nursery, behind which are more pens occupied by dogs. Past the nursery, the road ends at a gate leading to the pasture.

There is a lake on the eastern side of the property. An animal pen occupies the western edge of this lake, and a large, open, mulched area is located southwest of the lake.

Soils:

North Parcel

The Miami-Dade County Soil Survey (Figure 4) designates the entire area between the quarry and N.W. 41st Street as “udorthents-water complex”. This is not a hydric soil.

South Parcel

The Miami-Dade County Soil Survey shows an area of “udorthents-water complex” in the area around the lake in the northeast corner (not hydric). This is the developed portion of the property. Except for two marshes extending to the northeast and southeast of the lake and some low-lying Brazilian Pepper, this area is upland in characteristic. The rest of the site, currently being used as a pasture, consists of Lauderhill Muck, depressional, and Dania Muck, depressional, both of which are hydric soils.

Vegetation:

North Parcel

The eastern half of the fill pad is elevated about ten feet higher than the adjacent grade. It is overgrown with dense Ragweed (*Ambrosia artemisiifolia*, UPL) and Burma Reed (*Neyraudia reynaudiana*, FAC). The western half of the fill pad has developed wetland communities in low-lying depressions (Figure 5). These areas had standing water during our inspection (It was raining) and algal mats were evident (an indicator of wetland hydrology). The following wetland species were also noted in these low-lying wetland areas:

Lance-Leaf Arrowhead (<i>Sagittaria lancifolia</i>)	OBL
Barnyard Grass (<i>Echinochloa crusgalli</i>)	FACW
Marsh Fleabane (<i>Pluchea rosea</i>)	FACW
Water-Primrose (<i>Ludwigia octovalvis</i>)	FACW
Smooth Water-Hyssop (<i>Bacopa monnieri</i>)	OBL
Flat Sedge (<i>Cyperus odoratus</i>)	FACW
Switchgrass (<i>Panicum virgatum</i>)	FACW
Torpedo Grass (<i>Panicum repens</i>)	FACW (exotic)
Coastal Spikerush (<i>Eleocharis cellulosa</i>)	OBL
White-Top Sedge (<i>Rhychospora colorata</i>)	OBL
Loosestrife (<i>Lythrum alatum</i>)	OBL
Bristly Foxtail (<i>Setaria geniculata</i>)	OBL

These wetland areas are numerous, of varying sizes and have indistinct edges, so mapping them would be difficult.

The eastern end of this parcel is a forested area dominated by Australian Pine, Brazilian Pepper, Oyster plants (*Rhoeo spathacea*) and Neyraudia, all of which are exotic species. There is, however, wetland vegetation growing in the understory, particularly in low-lying depressions, including:

Torpedo Grass (<i>Panicum repens</i>)	FACW (exotic)
Sawgrass (<i>Cladium jamaicense</i>)	OBL
White-Top Sedge (<i>Rhychospora colorata</i>)	OBL
Coinwort (<i>Centella asiatica</i>)	FACW
Marsh Fleabane (<i>Pluchea rosea</i>)	FACW
Mistflower (<i>Conoclinium ceolestinum</i>)	FAC

South Parcel

The south parcel has a complex mix of cover types in the northeastern corner, dominated by nurseries, animal pens and overgrown areas, but the rest of the site consists only of pasture and

stands of dense *Melaleuca quinquenervia*, both of which are wetlands (Figure 5).

Pasture:

The majority of the property consists of open pasture. A herd of cows and some pigs were seen grazing in the pasture. The pasture is dominated by an unidentified pasture grass (Bahia?), but there was enough wetland vegetation to satisfy the criteria for a wetland, including:

Smooth Water-Hyssop (<i>Bacopa monnieri</i>)	OBL
Crinum Lilly (<i>Crinum americanum</i>)	OBL
Coinwort (<i>Centella asiatica</i>)	FACW
White Top Sedge (<i>Rhynchospora colorata</i>)	FACW
Water Pennywort (<i>Hydrocotyl sp.</i>)	FACW
Marsh Fleabane (<i>Pluchea rosea</i>)	FACW
Smartweed (<i>Polygonum sp.</i>)	OBL
Dog Fennel (<i>Eupatorium capillifolium</i>)	FACW
Frog-Fruit (<i>Phyla nodiflora</i>)	FAC
Pond Apple (<i>Annona glabra</i>)	OBL

Lake:

The other wetland type on this property includes the large pond surrounded on the north and south by tall mounds of fill that are dominated by Brazilian Pepper and Australian Pines, and a shallow eastern extension of the pond to within a few feet of the fence marking the eastern property line. The surrounding wetlands extend to the eastern fence line and end at a northern fence. The property to the north of that fence was inaccessible, but appeared to be upland, dominated by Brazilian Pepper. A small wedge of upland was marked in the SE corner of the property, apparently fill associated with construction of the adjacent toll booth.

Developed Site:

The vegetation throughout most of the disturbed/developed part of the property in the northeast corner of the property is upland or facultative, some of which appears to have been planted for landscaping purposes and includes:

<i>Sambucus canadensis</i>	Elderberry	FAC
<i>Wedelia trilobata</i>	Creeping Oxeye	FAC (exotic)
<i>Ricinus communis</i>	Castor Bean	UPL (exotic)
<i>Bougainvillea</i>	Bougainvillea	UPL
<i>Ficus sp.</i>	Fig	FAC-UPL
<i>Schinus terebinthifolius</i>	Brazilian Pepper	FAC
<i>Casuarina equisetifolia</i>	Australian Pine	FAC

Wetland Jurisdiction:

Requests for jurisdictional determinations (JD's) were sent to the Army Corps of Engineers by EAS Engineering in 2006. These JD's were requested for both the south site and the entire north site (not just the small parcel purchased for this project). The entire south site was determined to be Corps jurisdictional and most of the area north of the quarry in the north site was determined to be jurisdictional wetlands. The small parcel north of NW 41st Street was not determined to be jurisdictional at that time. EAS Engineering appealed the JD's on the grounds that they were isolated wetlands, but the appeal was denied in 2008. Those JD's expired in May, 2013.

Miami-Dade County DERM concluded in 2002 that the fill around the quarry at the north site was grandfathered, so it was not considered jurisdictional wetlands by DERM at that time. EAS Engineering's recent site inspection indicates, however, that since the muck screening facility has ceased operation, several low areas are now retaining storm water and are reverting to a wetland character.

EAS Engineering inspected the south site with Miami-Dade County DERM in 2006. DERM agreed with EAS's wetland determination, but noted that the mulch pile adjacent to the lake could be a violation because it was deposited relatively recently and there was no permit on file.

Permitting Considerations

Environmental resource permits will have to be obtained from the Army Corps of Engineers, the South Florida Water Management District and Miami-Dade County Department of Regulatory and Economic Resources (RER) for any work in the wetlands identified on these properties. These agencies require a sequential approach when working in wetlands. The sequence, in order, is:

Avoidance If possible, the developer is expected to avoid wetland impacts altogether by limiting the development to upland property only.

Minimization If avoidance is not possible, the developer is expected to minimize wetland impacts.

Mitigation If wetland impacts are unavoidable and if they have been minimized to the satisfaction of the agencies, then mitigation is considered.

The Army Corps of Engineers public notice presented in Appendix B discusses this sequence of avoidance, minimization and mitigation and served notice to developers that projects outside the UDB can be expected to be reviewed unfavorably by the Corps of Engineers.

Avoidance:

The proposed project will be a retail/entertainment destination with a regional draw. The search

for a site for this project focused on Minor Statistical Areas (MSA) No. 3.1 and 3.2 (Figure 9) because this area is adjacent to Miami International Airport and includes four major expressways, namely, the Homestead Extension of the Florida Turnpike, I-75, the Dolphin Expressway (S.R. 836) and the Palmetto Expressway (S.R. 826). Three factors were critical in selecting a site for this project:

1. Size
2. Proximity to Major Highways
3. Proximity to High Residential and Workforce Population

Minor Statistical Areas 3.1 and 3.2 cover 146 square miles, approximately 73 square miles of which lie within the existing Urban Development Boundary. It is the only area of the county in which portions of three major highways are located and the single largest employment center in the county. It is also the location of several retail uses that draw from a regional market, including International Mall and Dolphin Mall, as well as multiple auto dealerships.

The proposed project must have a Business and Office land use designation on the county's Land Use Map. There are only 13 vacant parcels in MSA's 3.1 and 3.2 with this designation that are greater than ten (10) acres in size. Most of those sites, however, are undergoing development or are in various stages of pre-development planning. Of these, only three vacant sites greater than ten (10) acres will be available by the end of the year. Those sites were examined and were rejected for a number of reasons, for example, one was a Development of Regional Impact and its development order limited retail development to 100-150 thousand square feet, another site was too far from the nearest highway, and the third site included an existing lake that limited development.

The subject property is ideal for this project and it appears to be the Least Environmentally Damaging Practicable Alternative (LEDPA). It is immediately adjacent to the existing Urban Development Boundary where all necessary urban services exist and it is connected to the City of Doral by N.W. 41st Street/Doral Boulevard, which is Doral's "main street". Doral is one of the fastest growing cities in Florida, not only as a result of its residential population, but just as importantly, its growing business community, which brings a strong and vibrant daily workforce to the immediate area.

Minimization:

The ±80 available acres on the subject parcels are barely sufficient to accommodate all of the proposed development. Setting aside any of this acreage to preserve wetlands would make the project economically unviable. Moreover, the existing wetlands are of marginal quality because they have been severely disturbed by past land uses (cattle grazing on the south site and quarry operations on the north site).

Mitigation:

There are opportunities for on-site mitigation, since the existing wetlands are heavily disturbed, and have a lot of exotic vegetation. On-site mitigation, however, would require that the proposed development be reduced in scope to accommodate the mitigation.

If there is insufficient land available for on-site mitigation, then off-site mitigation will be required. This would most likely require purchase of fresh water mitigation credits from FPL's Everglades Mitigation Bank. A WATER (Wetland Assessment Technique for Environmental Reviews) model must be conducted to calculate the number of mitigation credits required to offset environmental impacts. Fresh water mitigation credits currently cost \$85,000 per credit.

Cut and Fill Approval:

This project is located in the Area B drainage basin. The cut and fill criteria for this basin (Appendix C; Chapter 24-48.3(6) of the Miami-Dade County Code) will have to be met by providing sufficient areas of lake and retention/detention areas to retain all storm water runoff for a 100 year, 3 day storm event.

Wellfield Protection:

The subject properties are located within the protection zone for the Northwest Wellfield (Figure 6). Miami-Dade County has a wellfield protection ordinance that prohibits certain land uses that could endanger the county's water supply. A list of allowable land uses in wellfield protection areas is presented in Appendix D. This project will have to comply with those guidelines.

Potential for Existing Wetland Violations:

EAS Engineering examined the county's files regarding the muck screening operation at the north site, and that violation appears to have been resolved satisfactorily. There is some question as to whether any of the fill in the northeast corner of the south site is a wetland violation. Should any environmental violations be identified, they would have to be resolved by the property owner before any new permits would be issued.

Endangered Species:

The US Fish and Wildlife Service (USFWS) reviews permit applications for potential impacts to the Florida Panther. The USFWS has established two contiguous geographic zones that aid them in this review (Figure 7). The Primary Zone is occupied and supports the only known breeding population of panthers. The Secondary Zone is used to a lesser extent, but is important to the long-term viability of the panther. Panthers use these lands in a much lower density than in the Primary Zone. The subject property is five miles east of the closest Secondary Zone boundary and eight miles from the closest Primary Zone boundary.

The USFWS will also review permit applications for potential impacts to Wood Storks. Figure 8 shows the locations of wood stork nests in Miami-Dade County. The subject parcel is approximately six miles east of the nearest wood stork nest. The Florida Fish and Wildlife Conservation Commission considers the area within 18.6 miles (30 km) of a nesting colony as the Core Foraging Area for wood storks. The subject properties lie within the core foraging areas of at least nine existing wood stork nests. Potential wood stork impacts may increase the amount of mitigation required.

CERP Computability:

Regulatory agencies review pending applications to ensure that they are compatible with the Comprehensive Everglades Restoration Plan (CERP). The subject property is not within the boundary of any CERP component (Figure 10). The nearest CERP components are the Central Lakebelt Storage Area, located about 4.4 miles to the north, and the Bird Drive Recharge Area, located about 4.7 miles to the south. CERP compatibility should not be an issue for this application.

Tree Preservation:

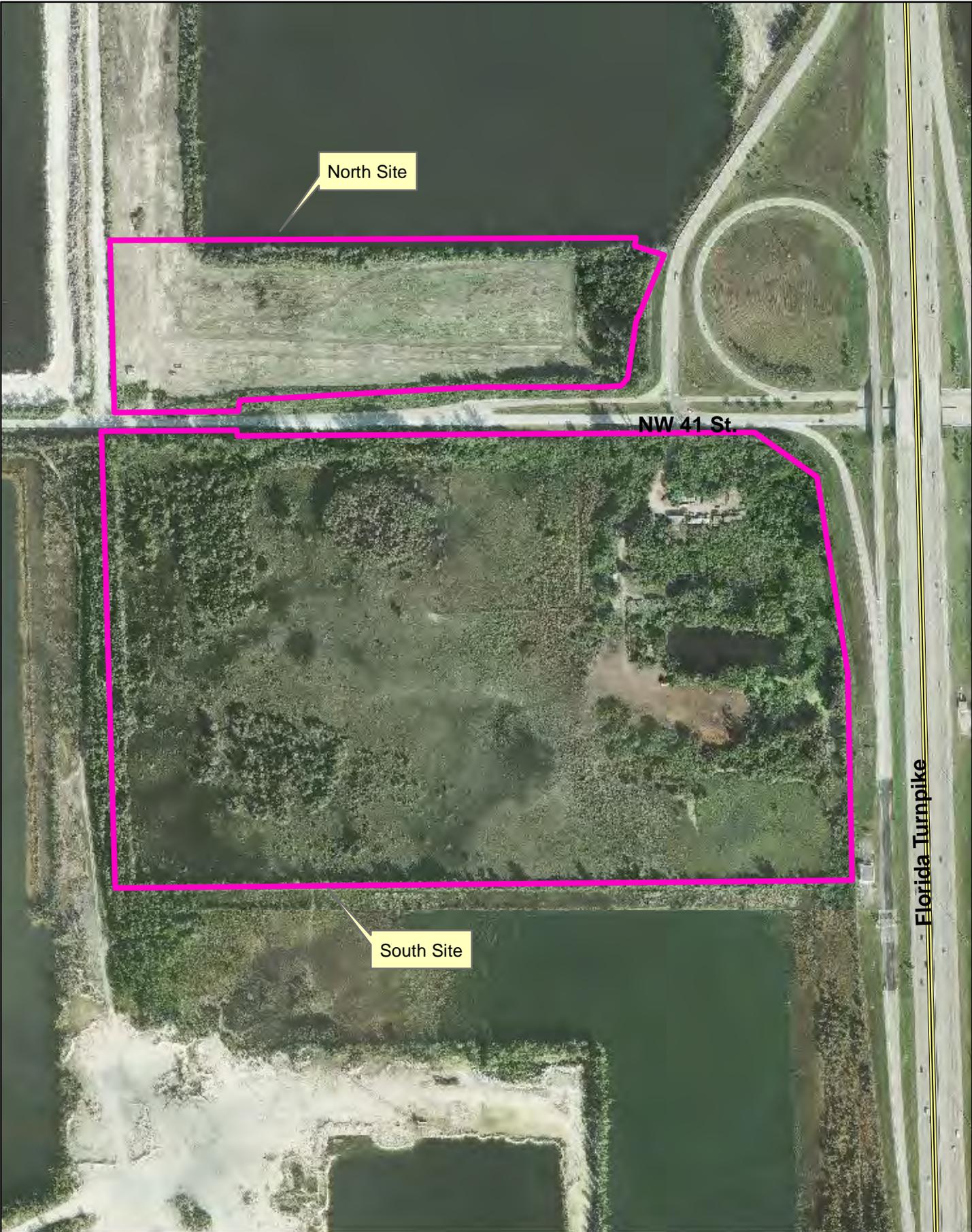
There are no known trees on the subject property that will require special permitting or preservation. Almost all of the trees are exotic species.

Pollution Remediation:

There is no known site contamination that will require remediation. Should any such contamination be discovered during site work, it will have to be dealt with appropriately.

Doral Crossing

Figure 1



Aerial_Fig1.pdf



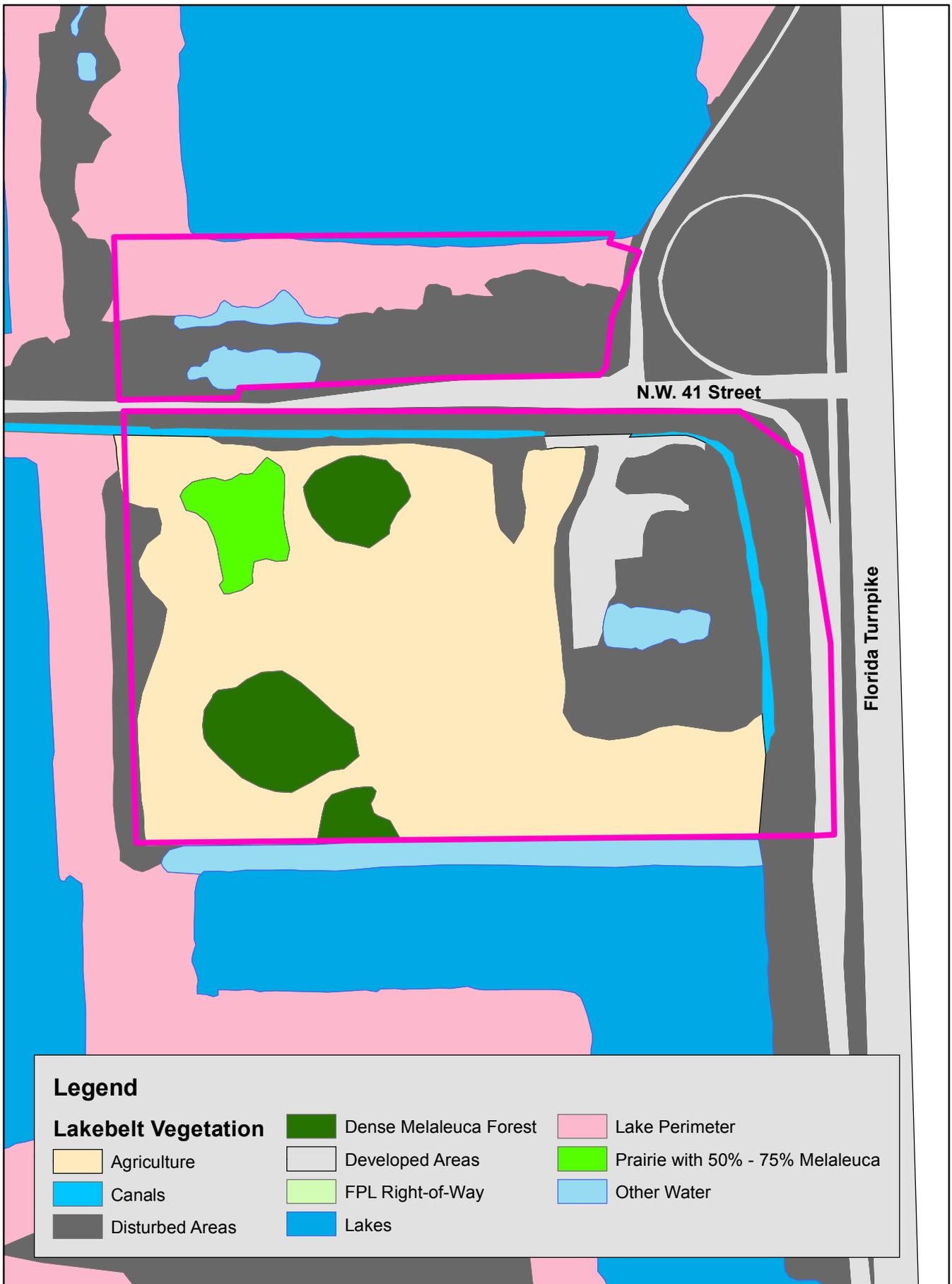
0 0.025 0.05 0.1 Miles

2012 Aerial Photo

EAS ENGINEERING, INC.

Doral Crossing Lakebelt Vegetation

Figure 2



LakebeltVeg_Fig2.pdf

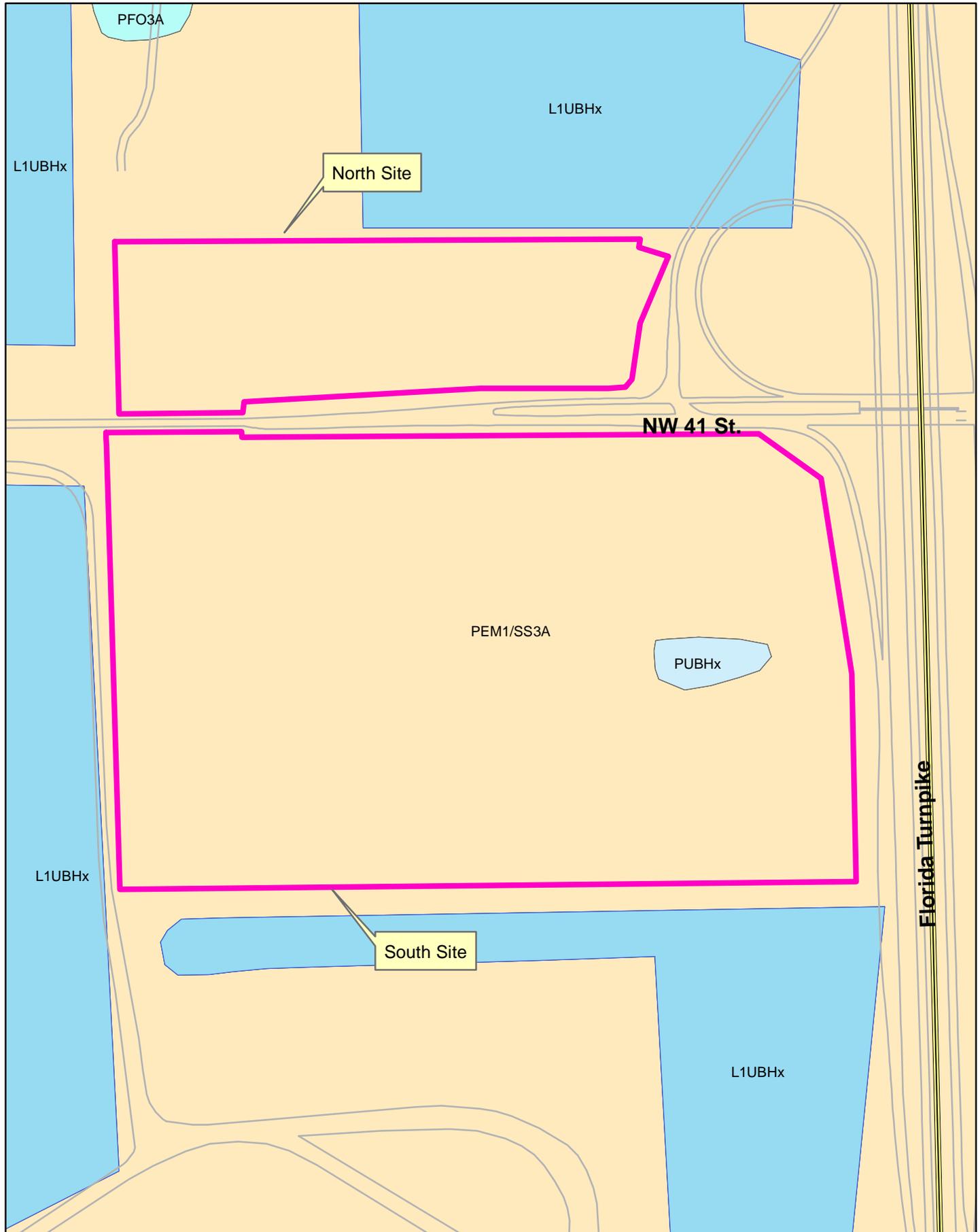


0 200 400 800 Feet

EAS Engineering, Inc.

Doral Crossing National Wetland Inventory

Figure 3



NWI_Fig3.pdf

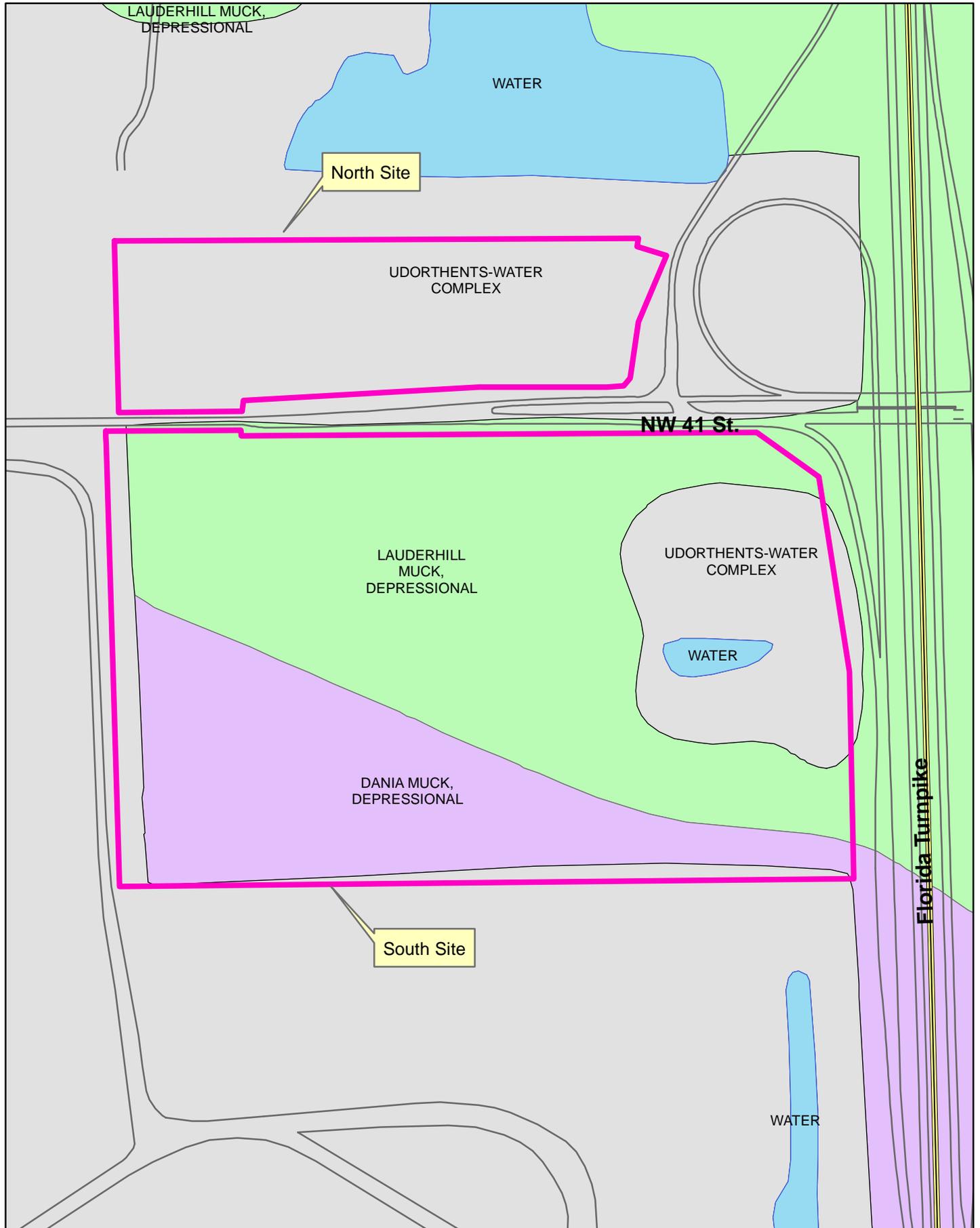


0 0.025 0.05 0.1 Miles

EAS ENGINEERING, INC.

Doral Crossing Soils

Figure 4



Soils_Fig4.pdf



0 0.025 0.05 0.1 Miles

EAS ENGINEERING, INC.

Doral Crossing Wetland Delineation

Figure 5



Wetland_Fig5.pdf



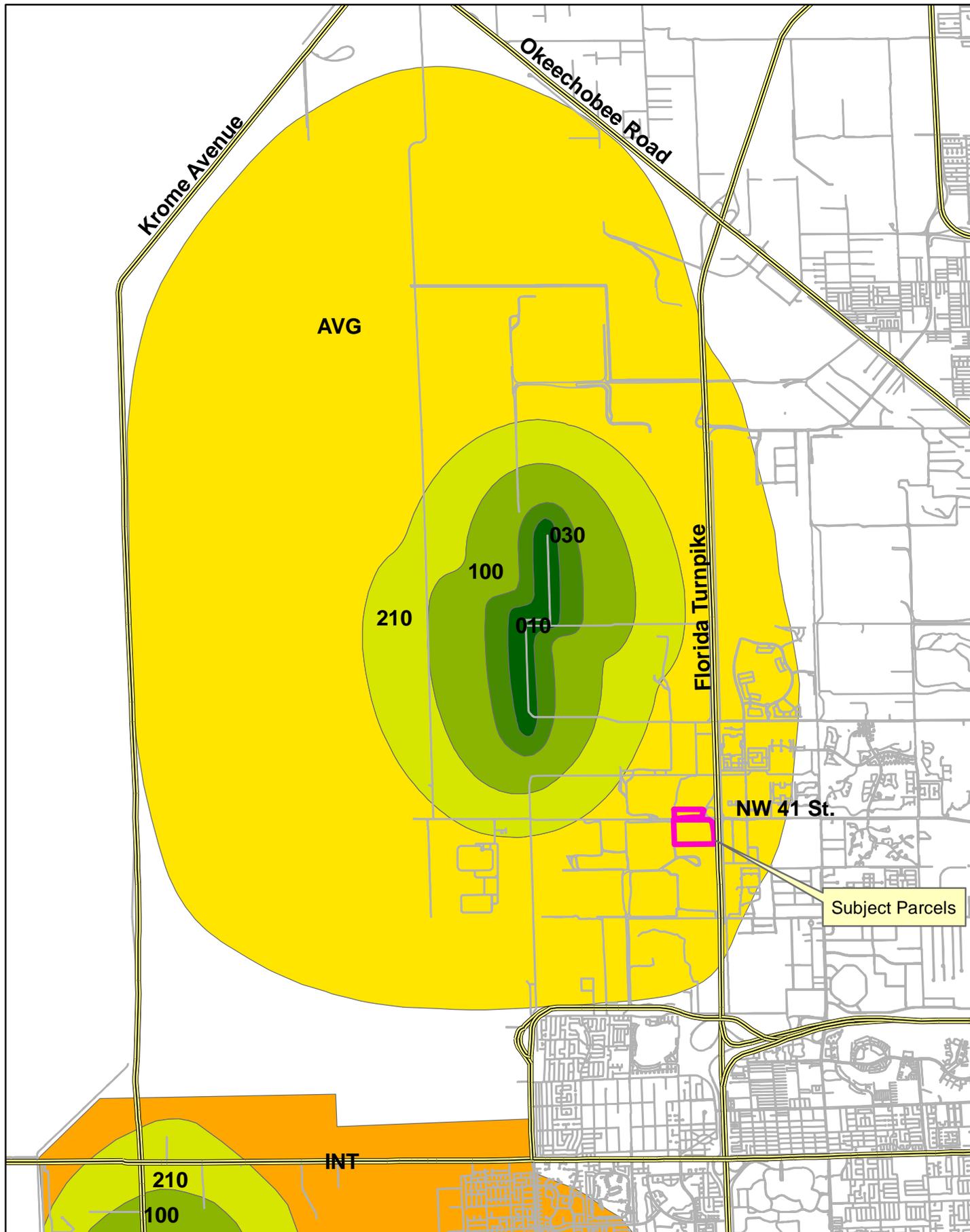
0 0.025 0.05 0.1 Miles

2012 Aerial Photo

EAS ENGINEERING, INC.

Doral Crossing Wellfield Protection Areas

Figure 6



WPA_Fig6.pdf

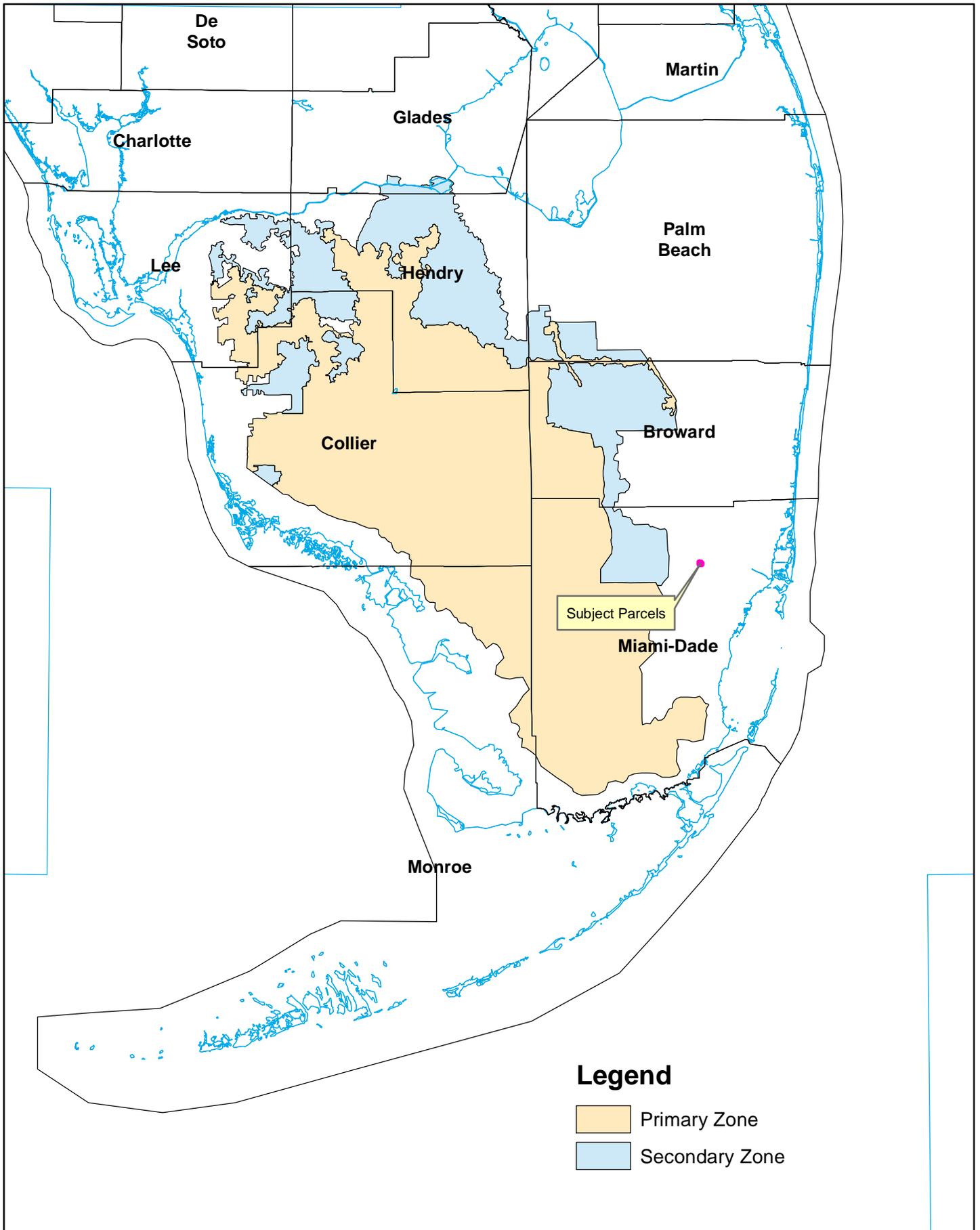


0 0.5 1 2 Miles

EAS ENGINEERING, INC.

Doral Crossing Panther Zones

Figure 7



Legend

- Primary Zone
- Secondary Zone

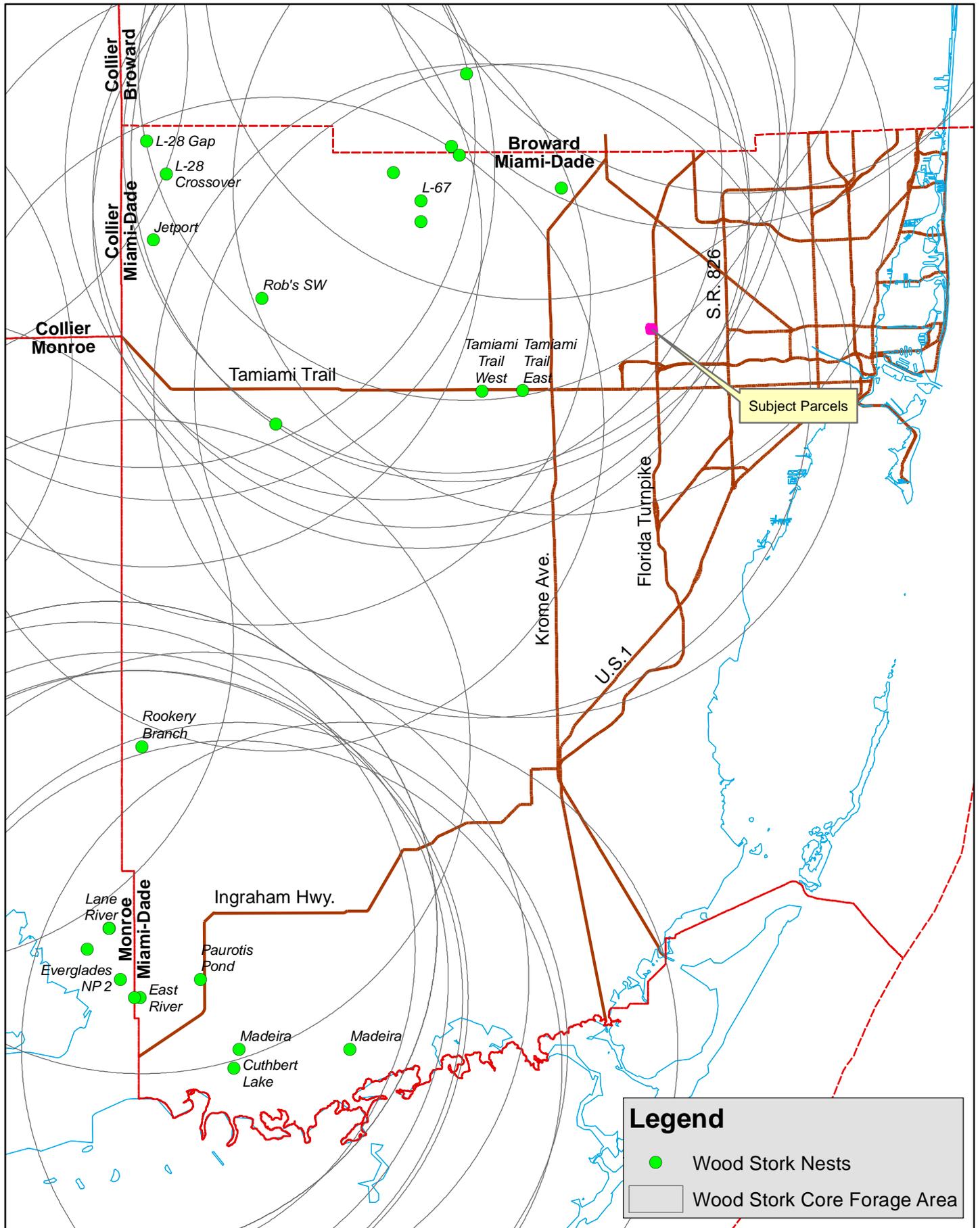
Panther_Fig7.pdf



0 5 10 20 Miles

Doral Crossing Wood Stork Core Foraging Areas

Figure 8



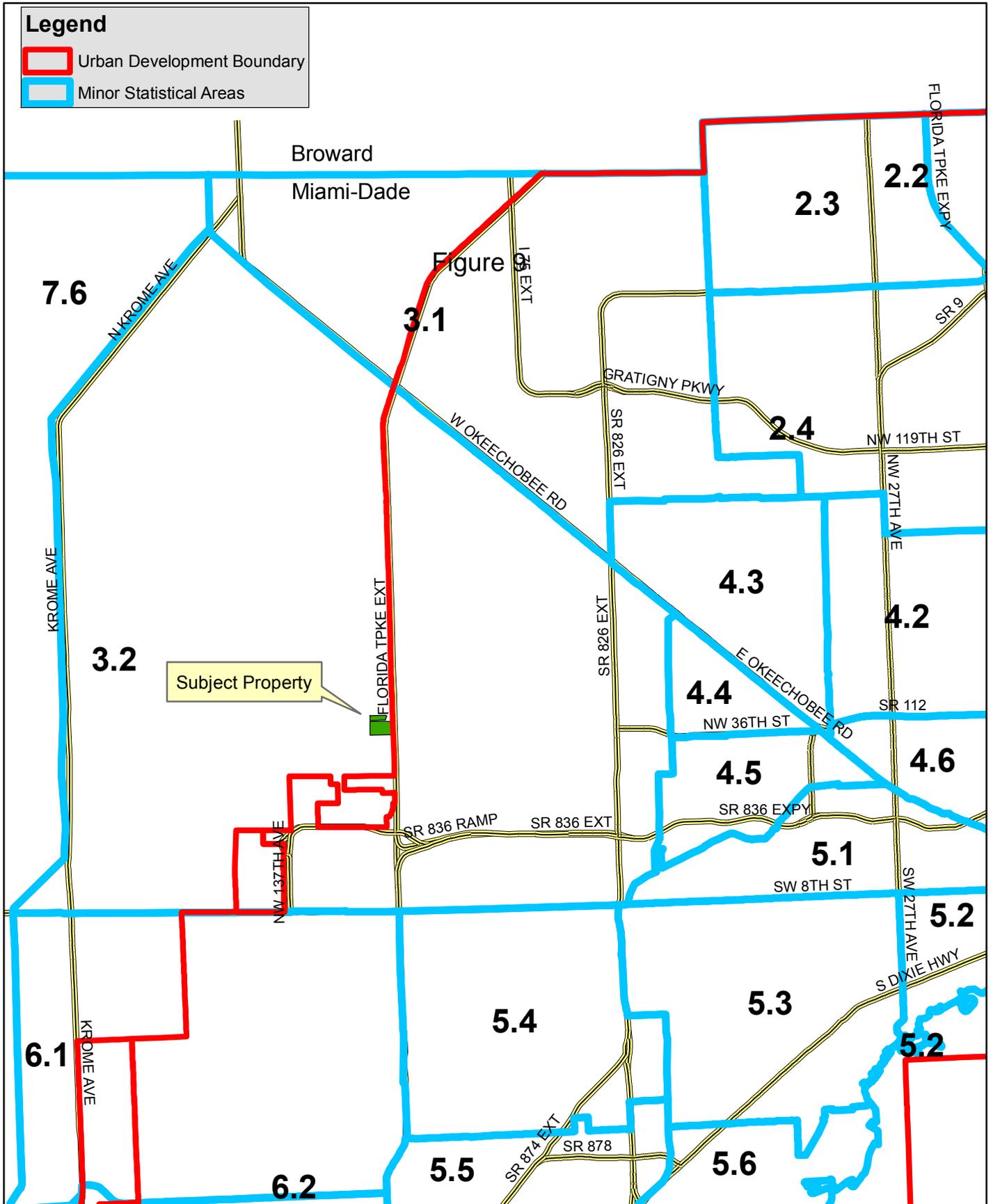
Wood Stork_Fig8.pdf

Legend

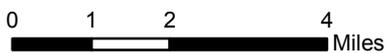
- Wood Stork Nests
- Wood Stork Core Forage Area

Doral Crossing Minor Statistical Areas

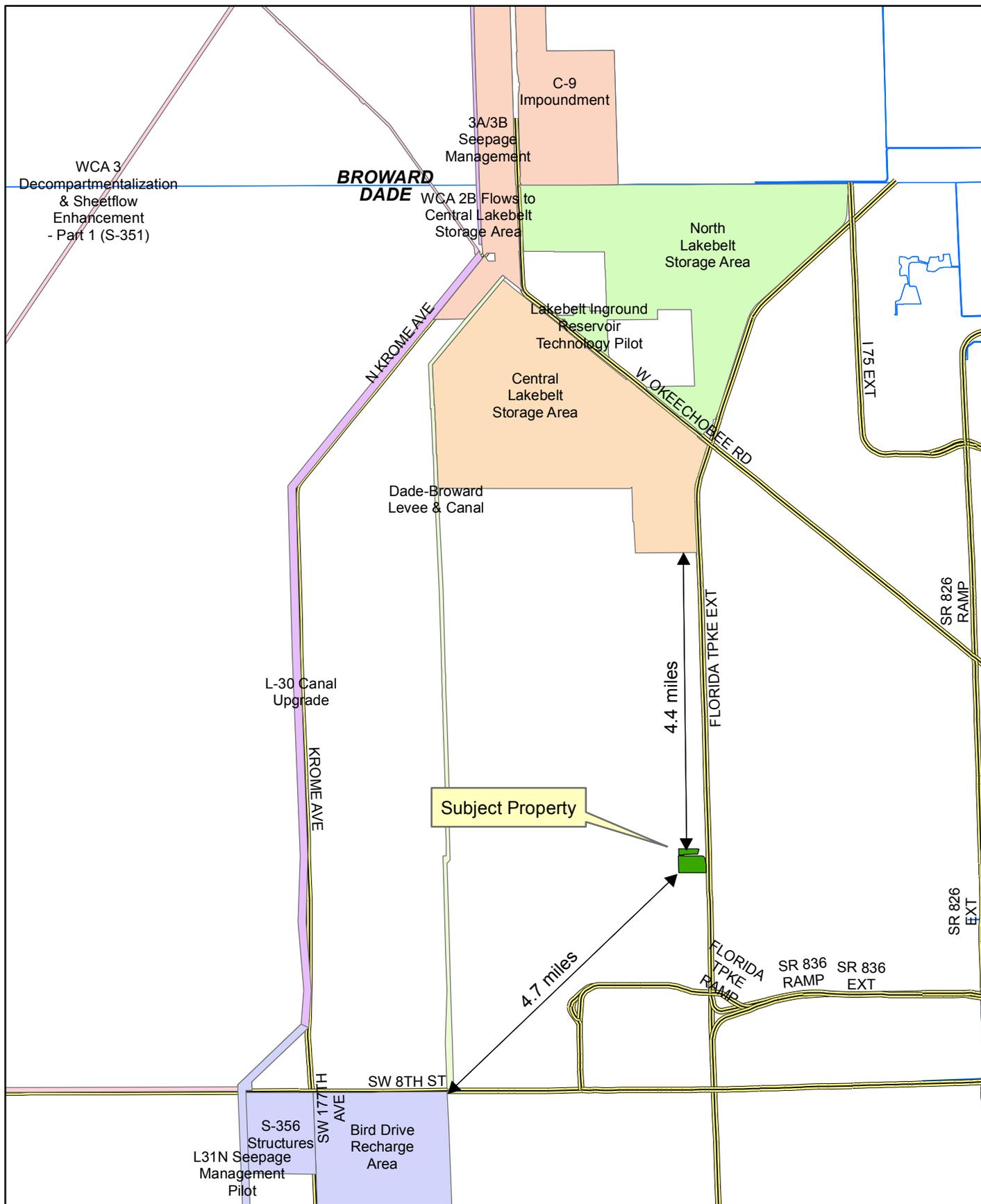
Figure 9



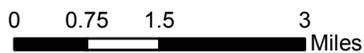
Zoning_Fig9_b.pdf



Doral Crossing CERP Projects



CERP_Fig10.pdf



APPENDIX A
Site Photos



Canal South of N.W 41st Street, looking East

1



Canal South of N.W. 41st Street, looking West

2



Southwest corner of north site

3



North site from western entrance road, looking east

4



5

Typical wetland area near elevated fill pad



6

Typical wetland area near western entrance road



7

Algal mat in shallow wetland



8

Typical wetland near elevated fill pad



View of quarry from southwest corner

9



View of quarry from southwest corner

10



11

Typical wetland area



12

Typical wetland area



13

Vegetation on top of elevated fill pad, looking West



14

Vegetation on top of elevated fill pad, looking West



15

Vegetation on south slope of elevated fill pad



16

Vegetation on west slope of elevated fill pad, looking East



17

Understory in forested area. Sawgrass and Oyster Plants in foreground.



18

Forested area, looking east toward turnpike exit ramp.



19

Sawgrass in understory of forested area



20

Sagittaria and Sawgrass in understory of forested area



21

Vegetation in pond in forested area



22

Edge of forested area, dominated by Neyraudia



23

Sawgrass in understory of forested area



24

Oyster plants near quarry in forested area



25

Dense Neyraudia in edge of forested area



26

Elevated fill pad as seen from forested area, looking West



27

Entrance to property



28

Goat pen near entrance



Cages near entrance

29



Filled area west of lake

30



31

Pasture vegetation



32

Shallow ditch in pasture



Pasture vegetation

33



Pasture vegetation

34



35

Developed area as seen from pasture



36

Pasture vegetation, looking west toward dense Melaleuca



Dense Melaleuca

37



Crinum Lillies near edge of dense Melaleuca stand

38



39

Wetland vegetation in between Melaleuca stands



40

Australian Pines near northern fence line



41

Pond Apple plant in pasture near north fence line



42

Pasture vegetation near western fence line



43

Pasture vegetation (typical)



44

Pasture vegetation (typical)



East edge of lake

45



Eastern property line at turnpike fence

46

APPENDIX B
Corps of Engineers Public Notice of Nov. 7, 2005.



Regulatory Division
South Permits Branch

REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
MIAMI REGULATORY FIELD OFFICE
11420 NORTH KENDALL DRIVE, SUITE 104
MIAMI, FLORIDA 33176

7 November 2005

PUBLIC NOTICE

Regulatory Procedures Regarding Freshwater and Coastal Wetlands of Miami-Dade County, Florida

Section 404 of the Clean Water Act (33 U.S.C. 1344), authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, for the discharge of dredged or fill material into the waters of the United States. (33 CFR Part 323). It is important for the regulated public of Miami-Dade County to understand what to expect when an application is submitted to the United States Army Corps of Engineers (Corps). The county's geography requires special consideration of high value resource relationships within drainage basins, landscapes and watersheds. The county is situated between the extensive and unique resources of the Florida Keys, National Parks and Aquatic Preserves. The developed area has a substantial impact on the ecological quality of the natural areas it borders to the east, west and south. Only projects that the Corps determines are not contrary to the public interest and which obey federal law, including compliance with the Section 404(b)(1) Guidelines are permissible.

A key element of the Corps' program is avoidance and minimization of aquatic resource impact. Avoidance of impact to aquatic functions and values to the maximum extent practicable is required prior to issuance of any Corps authorization. To demonstrate effective avoidance of impacts, either by considering other potential development sites or onsite avoidance, alternatives must be sought and considered. An alternative is considered practicable if it is available and capable of being completed after taking into consideration cost, existing technology, and logistics, in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the overall project purpose of the proposed activity may be considered. The Corps will also require avoidance of impacts onsite, by avoiding higher ecological value aquatic areas. Minimization of proposed impact to aquatic functions and values is also required by Corps regulations as part of the federal review process. Minimization includes actions such as stabilizing any authorized fill so it does not erode. Only after avoidance and minimization have been addressed compensatory mitigation may be considered. Compensatory mitigation is

required to offset unavoidable impacts to aquatic resources. Sufficient appropriate mitigation is required to adhere to the Clean Water Act (CWA) and for the Corps to determine that the proposed project is not contrary to the public interest (33 CFR 320.4(a)).

Regulatory Guidance Letter 93-02 instructs the Corps to carefully evaluate the functions and values of ecological resources. The Corps applies substantial rigor to projects that would impact aquatic areas with high ecological value. "The burden of proof to demonstrate compliance with the Guidelines rests with the applicant; where insufficient information is provided to determine compliance, the Guidelines require that no permit be issued. 40 CFR 230.12(a)(3)(iv)".

<http://www.sac.usace.army.mil/permits/93-02.html>

<http://www.usace.army.mil/inet/functions/cw/cecwo/reg/sec404.htm>

Applicants should involve the Corps early in the design phase of their projects to insure prudent utilization of time and assets. The Corps is committed to fair and flexible decisions, which protect the aquatic environment. Given the geographical setting of Miami-Dade County, the Corps will continue to require rigorous implementation of the federal guidelines for projects proposing impacts to high value ecological resources and to protect aquatic resources from cumulative and secondary impacts.

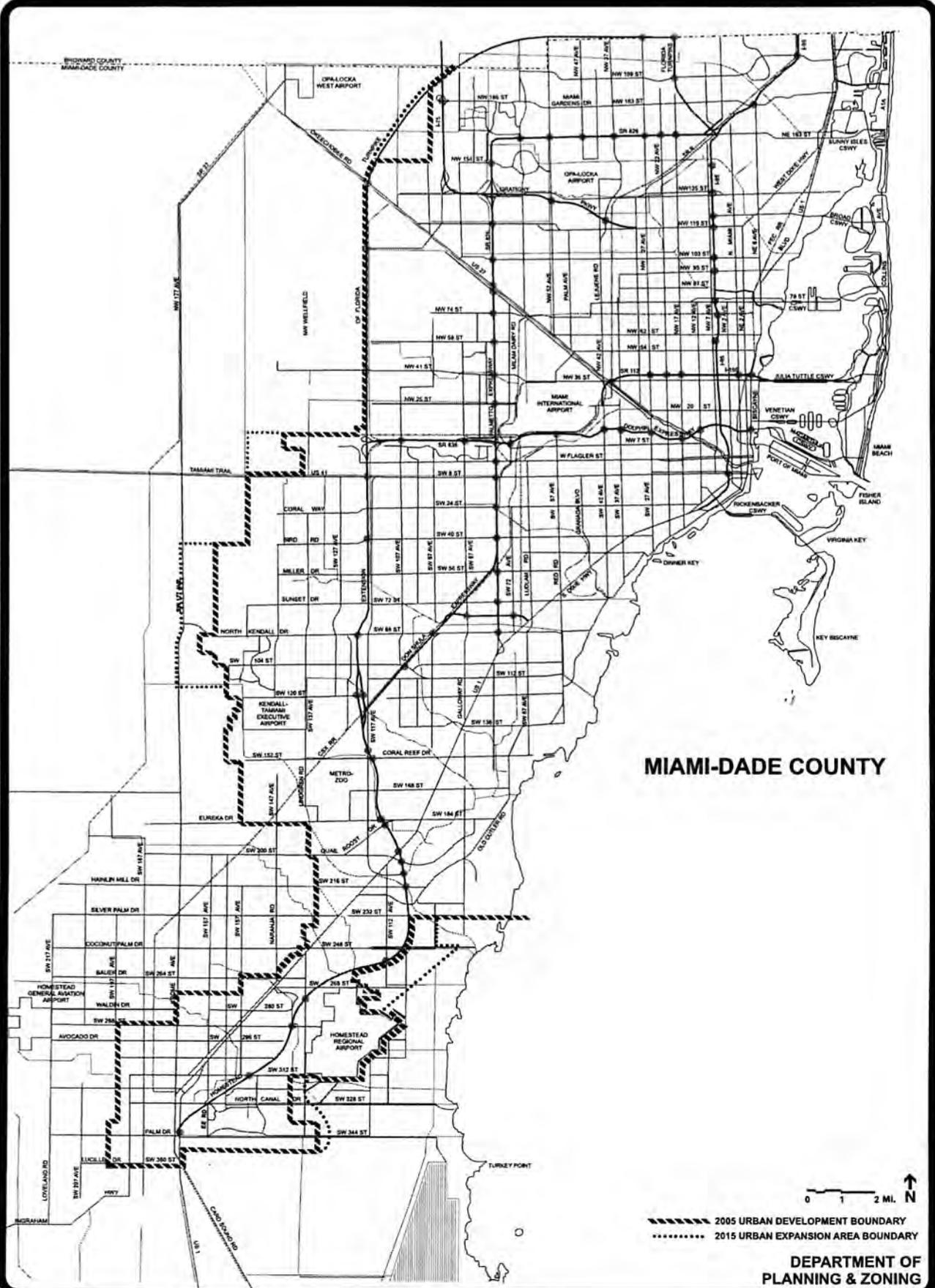
The Corps has reviewed the "Adopted 2003 Evaluation and Appraisal Report for the Comprehensive Development Master Plan (CDMP)" of Miami-Dade County. The CDMP is consistent with the Corps' goals. "Sufficient land exists within the Urban Development Boundary (UDB) to meet the projected requirements of Miami-Dade County until the year 2020". The regulated public should anticipate that future projects, proposed outside the current 2005 map of the UDB, may not to be viewed favorably, except in exceptional circumstances. The public is hereby notified that in the absence of compelling justification, the Corps will require use of upland and less detrimental wetland alternatives, such as exotic infested areas, within the UDB, and for all projects outside of the UDB.

http://www.miamidade.gov/planzone/planning_metro_CDMP.asp

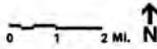
Point of contact for this Notice to the public is Paul Kruger, at 305-526-7185 or paul.e.kruger@saj02.usace.army.mil

A handwritten signature in black ink, appearing to read "Lawrence C. Evans". The signature is written in a cursive style with a large initial "L" and a long, sweeping underline.

for Lawrence C. Evans
Chief, Regulatory Division



MIAMI-DADE COUNTY



2005 URBAN DEVELOPMENT BOUNDARY
 2015 URBAN EXPANSION AREA BOUNDARY

DEPARTMENT OF PLANNING & ZONING

APPENDIX C
County Area B Cut and Fill Criteria

constructed or placed in accordance with all of the requirements of the Code of Miami-Dade County, Florida prior to October 11, 1985. The foregoing requirements in this subsection (3) shall not apply to:

- (a) fixed or floating docks or piers in tidal waters which are utilized exclusively for fishing, viewing Biscayne Bay, or swimming and which do not have one or more slips or mooring or fender piles present or proposed at or adjacent to the dock or pier, or
- (b) fixed or floating docks or piers in tidal waters which are utilized exclusively for launching canoes or kayaks, or
- (c) construction or placement of davits in tidal waters, provided that the davits are attached to seawalls or bulkheads, or
- (d) fixed or floating docks, piers or boat slips in tidal waters created by work requiring a permit under this Article if located in artificially created canals, provided the canal is bulkheaded and bordered by uplands on both sides of the canal, or
- (e) floating vessel platforms and floating boat lifts in tidal waters which qualify for the exemption contained within Section 403.813(2)(s), Florida Statutes.

Additionally, no permit shall be issued for a proposed ship or for any other proposed work requiring a permit under this Article which is to be used for the mooring or securing of a vessel, unless adequate water depth exists, including when the vessel is fully loaded.

(4) In addition to the applicable evaluation factors found in Section 24-48.3(1)(a) through (i) above, any filling in the wetlands of Miami-Dade County shall comply with the following criteria: All fill shall consist only of clean fill.

(5) In addition to the applicable evaluation factors set forth in Section 24-48.3(1)(a) through (i) above and the fill quality requirements set forth in Section 24-48.3(4) above, the following

requirements shall apply to any work within the North Trail Basin or within the Bird Drive Everglades Wetland Basin:

- (a) Except as provided in (e) below, the work shall be consistent with the North Trail Basin Plan (if it is located within the North Trail Basin), or shall be consistent with the Bird Drive Everglades Wetland Basin Plan (if it is located within the Bird Drive Everglades Basin). These plans are included in Sections 24-48.19 and 24-48.20 respectively.
- (b) All tree islands shall be preserved.
- (c) All proposed work which involves filling (a) stormwater management area(s) shall be constructed as specified in the North Trail Basin Fill Encroachment and Water Management Criteria for properties located within the North Trail Basin, or as specified in the Bird Drive Everglades Basin Fill Encroachment and Water Management Criteria, for properties located within the Bird Drive Everglades Wetland Basin.
- (d) Stormwater management areas which are less than five (5) acres in size and are located within the Urban Development boundary as it appears on the Comprehensive Development Master Plan's Land Use Map (as same is amended from time to time) shall not be left at natural grade (unfilled).
- (e) The side slopes of the stormwater management area(s) shall be no steeper than four (4) horizontal to one (1) vertical (4:1).

(6) In addition to the applicable evaluation factors set forth in Section 24-48.3(1)(a) through (i) above and the fill quality requirement set forth in Section 24-48.3(4) above, for projects located within Basin B, the total volume of fill material placed on a property between existing land elevation and elevation 7.58 NGVD shall not exceed the following formula: Area of site in square feet \times 1.8. As an alternative to the foregoing formula other engineering approaches consistent with the requirements of full on-site retention without exceeding established stages for the 100-year,

three-day storm shall be approved by the Director of the Department of Environmental Resources Management or his designee.

- (a) The side slope of stormwater management area(s) shall be no steeper than four (4) horizontal to one (1) vertical (4:1).

(7) In addition to the applicable evaluation factors contained within Section 24-48.3(1)(a) through (i) above, the following requirements shall apply to all work requiring a Class II Permit:

Wet retention shall not be utilized without prior pretreatment by means of dry detention or retention of the first inch of runoff from the proposed project's drainage area.

- (b) An on-site retention system of applicable design storm shall be utilized as the first priority for the disposal of stormwater runoff at any location in Miami-Dade County with the exception of projects located in the North Trail Basin, Bird Drive Basin, East Turnpike Basin, Western C-9 Basin or any other area subject to Miami-Dade County's cut and fill criteria.

The on-site retention systems required by this section shall include the following:

- (i) Surface infiltration through grassed swales, or
 - (ii) Underground disposal through exfiltration, or
 - (iii) Disposal by drainage wells, or
 - (iv) Disposal through dry retention ponds, or
 - (v) Any combination of any of the foregoing as approved by the director or his designee.
- (c) On-site retention combined with an overflow outfall may be used as an alternative to on-site retention in those cases where complete on-site retention is not feasible as determined by the director or his designee, when there is inadequate exfiltration

capability of the soil or in cases where a higher degree of flood protection is desired by the applicant.

All inlet structures located within grassed areas or landscaped strips may receive a 0.2 inch retention credit.

- (d) Existing positive drainage systems which for any reason require modification or relocation shall be constructed in accordance with the standards set forth in Section 24-48.3(7)(a) and (b) above, except for those portions of the existing project which will remain unaltered under the new plan.

(8) In addition to the applicable evaluation factors contained within Section 24-48.3(1)(a) through (i) above, the following requirements shall apply to all work requiring a class VI permit:

- (a) Drainage systems for all non-residential projects shall be designed and built to comply with the following standards:
 - (i) All requirements set forth in Section 24-48.3(7).
 - (ii) All inlet structures located within grassed areas or landscaping strips may receive a 0.2 inch retention credit. Furthermore, at least one (1) inch of pretreatment by means of dry detention or retention shall be provided as part of the required retention or detention prior to authorization of an overflow outfall.
 - (iii) Existing positive drainage systems which for any reason require modification or relocation shall be installed in a manner to comply with the standards set forth in Section 24-48.3(8)(a)(i) and (ii) above, except for those portions of the existing project which will remain unaltered under the new plan.

(9) An incomplete permit application shall become deactivated when the Miami-Dade County Department of Environmental Resources Management has notified the applicant by certified mail of the incomplete status of the application, and

APPENDIX D
Wellfield Protection Rules

tary sewers which pollutant may inhibit or disrupt the POTW's treatment process or operations; or which may inhibit or disrupt the POTW's sludge process, sludge use, or sludge disposal; or which causes a violation of the POTW's state or local discharge permits or prevents sewage sludge use or sewage sludge disposal in compliance with state or county regulations without first notifying the Director or the Director's designee in writing prior to the discharge. If prior notification is not possible because of circumstances beyond the control of the person responsible for such discharge then said discharge shall be reported to the Director or the Director's designee at the earliest practicable time after discovery of the discharge.

(3) *Categorical Pretreatment Standards.* It shall be unlawful for any industrial user to discharge any pollutant in violation of the Federal Pretreatment Standards set forth in 40 CFR 403.6. (Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.5. Bypassing unlawful.

Where a waste treatment facility has been provided, it shall be unlawful to by-pass the facility or any portion thereof and to discharge untreated or inadequately treated wastes to the waters the facility was designed to protect. In the event of an emergency, the user may temporarily utilize a by-pass. It shall be the user's responsibility to immediately notify the Director or the Director's designee. Such notification shall not relieve the user from civil liability under this chapter.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-42.6. Reserved.

Editor's note—Section 3 of Ord. No. 08-55, adopted May 5, 2008, repealed § 24-42.6, prohibition against use of hard detergents, in its entirety. Former § 24-42.6 derived from Ord. No. 04-214, adopted Dec. 2, 2004.

Sec. 24-42.7. Reserved.

Editor's note—Section 4 of Ord. No. 08-55, adopted May 5, 2008, repealed § 24-42.7, detergents, in its entirety. Former § 24-42.7 derived from Ord. No. 04-214, adopted Dec. 2, 2004.

DIVISION 2. WELLFIELD PROTECTION, DOMESTIC WELL SYSTEMS AND POTABLE WATER STANDARDS

Sec. 24-43. Protection of public potable water supply wells.

The provisions of this section which impose upon land uses within the West Wellfield Interim protection area regulations which are more restrictive than those regulations applicable to the other public utility potable water supply wellfields in Miami-Dade County shall be deemed interim in nature. Said more restrictive regulations shall be reviewed by such technical review task force(s) or committee(s) as provided by the Board of County Commissioners or its designee upon recommendation of the Director. The Director shall submit to the Board of County Commissioners progress reports, as necessary, pertaining to said review, and recommendations necessary to protect the public health, safety and welfare arising out of said review shall be presented to the Board of County Commissioners. The Miami-Dade County Conflict of Interest and Code of Ethics Ordinance (Section 2-11.1 of this Code) shall not be applicable to task forces or committees provided for in this section.

- (1) *Legislative intent.* The intent and purpose of this section is to safeguard the public health, safety and welfare by providing scientifically established standards for land uses within the cones of influence thereby protecting public potable water supply wells from contamination.
- (2) *Short title; applicability; construction.* This section shall be known as the "Potable Water Supply Well Protection Ordinance." The provisions of this section shall be effective in the incorporated and unincorporated areas of Miami-Dade County and shall be liberally construed to effect the purposes set forth herein.
- (3) *Maps of cones of influence, the Northwest Wellfield protection area, the West Wellfield Interim protection area, and the South Miami Heights Wellfield Complex protection area.* The Director or the Director's designee, shall maintain maps of cones of

influence of public utility potable water supply wells, map(s) of the Northwest Wellfield protection area, map(s) of the West Wellfield Interim protection area, and the map(s) of the South Miami Heights Wellfield Complex wellfield protection area dated November, 2005. The cone of influence maps dated December 30, 1980, as may be amended from time to time, prepared by the Department are incorporated herein by reference hereto. Any changes, additions or deletions to said maps shall be approved by the Board of County Commissioners by ordinance. The cone of influence maps of the Northwest Wellfield dated December 30, 1980, as amended effective May 31, 1985, shall hereinafter be referred to as the Northwest Wellfield protection area map(s). The Northwest Wellfield protection area map(s) dated May 31, 1985, the West Wellfield Interim protection area map(s) dated February 28, 1989 and the map(s) of the South Miami Heights Wellfield Complex wellfield protection area dated November, 2005, as all of same may be amended from time to time, prepared by the Department, are incorporated herein by reference hereto. Any changes, additions or deletions to said Northwest Wellfield protection area map(s), West Wellfield Interim protection area map(s) or South Miami Heights Wellfield Complex wellfield protection area map(s) shall be approved by the Board of County Commissioners by ordinance. The Director, or the Director's designee, shall maintain the DERM Technical Report: "Development of a Groundwater Model to Determine Wellfield Protection Zones for the Miami-Dade County, Florida, South Miami Heights Wellfield Complex". The wellfield protection zones of the South Miami Heights Wellfield Complex have been established using the procedures and input parameters set forth in the aforesaid Technical Report dated, November, 2005. The aforesaid Technical Report dated, November, 2005, a copy of which is attached hereto, is hereby incorporated by reference, as same may be

amended from time to time. Any changes, additions or deletions to the aforesaid Technical Report dated November, 2005 shall be approved by the Board of County Commissioners by ordinance.

- (4) *Septic tanks, sanitary sewers, storm water disposal, liquid waste storage, disposal or treatment and violations of this chapter within wellfield protection area.* Notwithstanding any provisions of this Code, no County or municipal officer, agent, employee or board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any land use served or to be served by a septic tank, sanitary sewer, storm water disposal method, or liquid waste storage, disposal or treatment method, and which is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the basic wellfield protection area of any public utility potable water supply well, until the County or municipal officer, agent, employee or Board has obtained the prior written approval of the Director or the Director's designee. Furthermore, not withstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use served or to be served by septic tank, sanitary sewer, storm water disposal method, or liquid waste storage, disposal or treatment

method, and which is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the basic wellfield protection area of any public utility potable water supply well, until the person has obtained the prior written approval of the Director or the Director's designee. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only if the Director or the Director's designee finds that all septic tanks, septic tank drain fields, storm water disposal methods and liquid waste storage, disposal or treatment methods will be installed upon the property as far away as is reasonably possible from all potable water supply wells, and:

- (a) *Septic tanks.* That the septic tank sewage loadings will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in Tables A-1, A-2, A-3 and A-4, except that neither the Director nor the Director's designee shall issue the Director's or the Director's designee's written approval for any land use served or to be served by a septic tank within the Northwest Wellfield protection area unless the septic tank was installed prior to September 30, 1983, or within the West Wellfield Interim protection area unless the septic tank was installed prior to the effective date of this ordinance [Ordinance No. 89-80], or that the land use served or to be served by a septic tank within the Northwest Wellfield protection area or within that portion of the West Wellfield Interim protection area

which is west of the Urban Development Boundary of the Comprehensive Development Master Plan as may be amended from time to time, is residential or is an ancillary rockmining use necessary for extracting and processing subsurface materials and which residential or ancillary rockmining use shall not exceed a maximum sewage loading of seventy (70) gallons per day per acre and which septic tanks shall be located within an area of twenty-one thousand seven hundred eighty (21,780) square feet of unsubmerged land, or that the property served or to be served by septic tanks is residential, uses a public water supply, has not been the subject of any zoning action (district boundary change, unusual use, use variance, or equivalent municipal zoning action) or any platting action (final plat, waiver of plat, or equivalent municipal platting action) after March 13, 1981, and is in compliance with Section 24-43.1, or that the owner of the property served or to be served by septic tanks is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the Northwest Wellfield protection area obtained prior to September 30, 1983, or, in the case of property within the West Wellfield Interim protection area obtained prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance, or, in the case of property not within the basic wellfield protection area but within the maximum day pump-

age wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield and Southwest Wellfield, obtained prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield and Hialeah Wellfield, obtained prior to December 12, 1986, which permit has been valid and continuously in full force and effective since its issuance, or that the owner of the property is applying for a certificate of use and occupancy or municipal occupational license for a land use served or to be served by a septic tank installed prior to March 13, 1981 for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the Northwest Wellfield protection area installed prior to September 30, 1983, or, in the case of property within the West Wellfield Interim protection area installed prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, and Southwest Wellfield, installed prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield and Hialeah Wellfield, installed prior to Decem-

ber 12, 1986, which uses a public water supply and which is in compliance with Section 24-43.1.

- (i) Notwithstanding the provisions of Section 24-43(4)(a), there shall be required within the Northwest Wellfield protection area, within the West Wellfield Interim protection area, within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, and within the maximum day wellfield protection area of all public utility potable water supply wells a minimum separation equivalent to ten (10) days travel time between any potable water supply well (other than a public utility potable water supply well) and any septic tank or septic tank drainfield.
- (b) *Sanitary sewers.* That the sewage loading into sanitary sewers will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in Table B-1, or that the property served or to be served by sanitary sewers is residential, uses a public water supply, has not been the subject of any zoning action (district boundary change, unusual use, use variance, or equivalent municipal zoning action) or any platting action (final plat, waiver of plat, or equivalent municipal platting action) after March 13, 1981, and is in compliance with Section 24-42.4, or that the owner of the property served or to be served by sanitary sewers is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the North-

west Wellfield protection area, obtained prior to September 30, 1983, for property within the Northwest Wellfield protection area, or, in the case of property within the West Wellfield Interim protection area, obtained prior to the effective date of this ordinance, or for property within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance, or, in the case of property not within the basic wellfield protection area, but within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield and Southwest Wellfield, obtained prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield and Hialeah Wellfield, installed prior to December 12, 1986, which permit has been valid and continuously in full force and effect since its issuance.

- (i) Notwithstanding the provisions of Section 24-43(4)(b), all sanitary sewers installed within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable wa-

ter supply well, after June 13, 1986, shall comply with the following standards:

Residential land use—No gravity sanitary sewer shall have an exfiltration rate greater than fifty (50) gallons per inch pipe diameter per mile per day. Sewer lateral lines located in the public right-of-way shall be a minimum of six (6) inches in diameter.

Nonresidential land use—No gravity sanitary sewer shall have an exfiltration rate greater than twenty (20) gallons per inch pipe diameter per mile per day. Sewer lateral lines located in the public right-of-way shall be a minimum of six (6) inches in diameter.

Sanitary sewer force mains—All sanitary sewer force mains installed within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply

well, shall be constructed of either ductile iron or reinforced concrete pressure sewer pipe. No such ductile iron sanitary sewer force main shall, exfiltrate at a rate greater than the allowable leakage rate specified in American Water Works Association Standard C600-82 at a test pressure of one hundred (100) pounds per square inch. No such reinforced concrete pressure sanitary sewer force main shall exfiltrate at a rate greater than one-half ($\frac{1}{2}$) the allowable leakage rate specified for ductile iron pipe in American Water Works Association Standard C600-82 at a test pressure of one hundred (100) pounds per square inch.

- (ii) Notwithstanding the provision of Section 24-43(4)(b), all gravity sanitary sewers with invert elevations above the average surrounding water table elevation and all sanitary sewer force mains shall be tested to ensure compliance with the aforementioned exfiltration rate standards.

A registered professional engineer shall provide written certification of the exfiltration rate for all manhole/gravity sewer pipe systems installed, in equivalent gallons per inch pipe diameter per mile of pipe per day (twenty-four (24) hours), and the exfiltration rate for all sanitary sewer force mains in gallons per hour per one thousand (1,000) feet of sanitary sewer force main installed. Existing gravity sanitary sewers with pipe diameters of eight (8) inches

or more shall be visually inspected by television every five (5) years by the responsible utility or property owner to ensure both structural and pipe joint integrity. Existing manholes shall be visually inspected for both structural and incoming pipe connection integrity every five (5) years.

Certified test and inspection results and repair logs shall be submitted to the Department within thirty (30) days after completion of the particular test, inspection, or repair.

- (c) *Storm water disposal methods.* That the storm water disposal methods utilized or to be utilized will be limited as set forth in Table C-1.

Furthermore, land uses adjacent to the Snapper Creek extension canal and secondary canals directly connected to the Snapper Creek extension canal shall provide an earth berm, or alternative structure as approved by the Director or the Director's designee, which shall be constructed upon the perimeter of all canals to prevent overland storm water runoff from entering the canal. The berm shall be constructed adjacent to the canal top of slope on the landward side. Said berm shall extend one (1) foot above the canal bank elevation. The landward slope of the berm shall have a gradient not steeper than one (1) foot vertical to four (4) feet horizontal. The canalward slope shall not be steeper than the canal slope. The construction of berming and backsloping shall be subject to the approval of the Director or the Director's designee.

- (d) *Liquid waste storage, disposal or treatment methods other than septic tanks utilized for the disposal, discharge, storage or treatment of domestic sewage; sanitary sewer lift*

stations; and public sanitary sewers. That liquid waste storage, disposal or treatment methods (other than septic tanks utilized for the disposal, discharge, storage or treatment of domestic sewage; sanitary sewer lift stations; and public sanitary sewers); shall be prohibited within the Northwest Wellfield protection area, the West Wellfield Interim protection area, the outer wellfield protection zone of the South Miami Heights Wellfield Complex, the average day pumpage wellfield protection areas of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, and Hialeah Wellfield, and the basic wellfield protection area of any public utility potable water supply well unless, in the case of property within the Northwest Wellfield protection area, said liquid waste storage, disposal or treatment method was installed prior to September 30, 1983, or, unless, in the case of property within the West Wellfield Interim protection area, said liquid waste storage, disposal or treatment method was installed prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights wellfield complex installed prior to the effective date of this ordinance, or, unless, in the case of property within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield and Southwest Wellfield, said liquid waste storage, disposal or treatment method was installed prior to February 1, 1985, or, in the case of property not within the basic wellfield protection area but within the average day pumpage wellfield protec-

tion area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, and Hialeah Wellfield, said liquid waste, storage, disposal or treatment method was installed prior to December 12, 1986, unless in the case of property within the basic wellfield protection area of any public utility potable water supply well, said liquid waste storage, disposal or treatment method was installed prior to June 13, 1986.

- (e) *Violations of this chapter.* That the septic tank, sanitary sewer, storm water disposal method or liquid waste storage, disposal or treatment method utilized or to be utilized will serve an existing land use within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, and Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well and which is required by the Director or the Director's designee to correct violation(s) of this chapter. Notwithstanding the foregoing, the Director or the Director's designee shall not issue the Director's or the Director's designee's written approval unless the Director or the Director's designee determines that the land use will comply with all the provisions of this chapter and that the following water pollution prevention and abatement measures and practices shall be provided:
 - (i) Monitoring and detection of water pollution caused by hazardous materials, and

- (ii) Secondary containment of water pollution caused by hazardous materials, and
 - (iii) Inventory control and record keeping of hazardous materials, and
 - (iv) Storm water management of water pollution caused by hazardous materials, and
 - (v) Protection and security of facilities utilized for the generation, storage, usage, handling, disposal or discharge of hazardous materials.
- (5) *Prohibition of hazardous materials within wellfield protection areas.* Notwithstanding any provisions of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any nonresidential land use, other than a bona fide agricultural land use, a bona fide rockmining use (lake excavation), a public sewer facilities use, or a public water supply facilities use, within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, John E. Preston Wellfield, or Hialeah Wellfield or within the basic wellfield protection area of any public utility potable water supply well, without obtaining the prior written approval of the Director or the Director's designee. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only

if the Director or the Director's designee determines that the nonresidential land use is in compliance with Sections 24-43(5)(a), 24-43(5)(b) or 24-43(5)(c).

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any nonresidential land use, other than a bona fide agricultural land use, a public sewer facilities use, or a public water supply facilities use, within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well, and which uses, generates, handles, disposes of, discharges or stores hazardous materials, until the person has obtained the prior written approval of the Director or the Director's designee.

Pursuant to the foregoing, the Director or the Director's designee shall issue his written approval only if the Director or the Director's designee determines that all potential sources of pollution will be installed upon the property as far away as is reasonably possible from all potable water supply wells; hazardous materials will not be used, generated, handled, disposed of, discharged or stored on that portion of the property within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the basic wellfield protection area of any public utility potable water supply well; and hazardous wastes will not be used, generated, handled, disposed of, discharged or stored on that portion of

the property within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, or within the average day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield.

Notwithstanding the foregoing, fuels and lubricants required for rockmining operations (lake excavations, concrete batch plants, rock crushing and aggregate plants) within the Northwest Wellfield protection area or within the West Wellfield Interim protection area; electrical transformers serving nonresidential land uses; small quantity generators of hazardous wastes as defined in this chapter, within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, Hialeah Wellfield, and the South Miami Heights Wellfield Complex and existing land uses required by the Director or the Director's designee to correct violations of this chapter; shall not be prohibited when the water pollution prevention and abatement measures and practices set forth in Sections 24-43(5)(a)(i), (ii), (iii), (iv) and (v) will be provided and the Director or the Director's designee has approved same.

Notwithstanding the foregoing, the use, handling or storage of factory prepackaged products intended primarily for domestic use or consumption determined by the Director or the Director's designee to be hazardous materials shall not be prohibited; provided, however, that the requirements of Sections 24-43(5)(a)(vi), (vii), (viii) and (ix) are fulfilled.

- (a) The owner of the property has submitted to the Director or the Director's

designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that hazardous materials shall not be used, generated, handled, disposed of, discharged or stored on that portion of the property located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the basic wellfield protection area of any public utility potable water supply well; and that hazardous wastes shall not be used, generated, handled, disposed of, discharged or stored on that portion of the property within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex.

Furthermore, the aforesaid covenant shall provide that fuels and lubricants required for rockmining operations (lake excavations, concrete batch plants, rock crushing and aggregate plants) within the Northwest Wellfield protection area or within the West Wellfield Interim protection area; electrical transformers serving nonresidential land uses; small quantity generators of hazardous wastes as defined in this chapter, within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the average day pumpage wellfield protection area but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John

E. Preston Wellfield, and Hialeah Wellfield and existing land uses required by the Director or the Director's designee to correct violations of this chapter; shall not be prohibited when the following water pollution prevention and abatement measures and practices will be provided:

- (i) Monitoring and detection of water pollution caused by hazardous materials, and
- (ii) Secondary containment of water pollution caused by hazardous materials, and
- (iii) Inventory control and record keeping of hazardous materials, and
- (iv) Storm water management of water pollution caused by hazardous materials, and
- (v) Protection and security of facilities utilized for the generation, storage, usage, handling, disposal or discharge of hazardous materials.

Said water pollution prevention and abatement measures and practices shall be subject to the approval of the Director or the Director's designee.

Furthermore, the aforesaid covenant shall provide that use, handling or storage of factory pre-packaged products intended primarily for domestic use or consumption determined by the Director or the Director's designee to be hazardous materials shall not be prohibited, provided, however, that:

- (vi) The use, handling or storage of said factory prepackaged products occurs only within a building, and
- (vii) The nonresidential land use is an office building use (or equivalent municipal land use) or a

business district use (or equivalent municipal land use) engaged exclusively in retail sales of factory prepackaged products intended primarily for domestic use or consumption, and

- (viii) The nonresidential land use is served or is to be served by public water and public sanitary sewers, and
- (ix) Said building is located more than thirty (30) days' travel time from any public utility potable water supply well.

Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property, or

- (b) If the Director or the Director's designee determines that the owner of the property is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, for property within the basic wellfield protection area of any public utility potable water supply well, or, in the case of property within the Northwest Wellfield protection area, obtained prior to September 30, 1983, or, in the case of the West Wellfield Interim protection boundary, obtained prior to the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex obtained prior to the effective date of this ordinance, or, in the case of property within the average day pumpage wellfield protection area, but not within the basic wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield or Southwest

Wellfield, obtained prior to February 1, 1985 or, in the case of property not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield, obtained prior to December 12, 1986 and which permit has been valid and continuously in full force and effect since its issuance, or

(c) If the Director or the Director's designee determines:

(i) That the application for a building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) is for the replacement, modification or limited expansion of an existing facility, provided in no case shall such replacement, modification or limited expansion cause, permit, let, suffer or allow the use, generation, handling, disposal, discharge or storage of hazardous materials on the property to be increased by more than fifty (50) percent over the use, generation, handling, disposal, discharge or storage of hazardous materials which existed on the property on September 30, 1983, for properties within the Northwest Wellfield protection area, or which existed on the property on the effective date of this ordinance [Ord. No. 89-80] for properties within the West Wellfield Interim protection

area, or which existed on March 13, 1981 for properties within the basic wellfield protection area of any public utility potable water supply well, and

(ii) That the proposed replacement, modification or limited expansion of the existing facility will substantially reduce the existing risk of pollution from the hazardous materials to the closest public utility potable water supply well. In determining whether there will be a substantial reduction of the existing risk of pollution as aforesaid, the Director or the Director's designee shall consider the following factors and shall render written findings as to the Director's or the Director's designee's assessment of each:

1. Whether the proposed replacement, modification or limited expansion of the facility will provide adequate and increased monitoring and detection of pollution which may be or which has been caused by the hazardous materials on the property.
2. Whether the proposed replacement, modification or limited expansion of the facility will provide adequate and increased secondary containment of pollution which may be or which has been caused by the hazardous materials on the property.
3. Whether the proposed replacement, modification or limited expansion will provide adequate and increased inventory control and record keeping of hazardous materials on the property.

4. Whether the proposed replacement, modification or limited expansion will provide adequate and increased storm water management of pollution which may be or which has been caused by the hazardous materials on the property.
5. Whether the proposed replacement, modification or limited expansion will provide adequate and increased protection and security of the facilities utilized for the generation, storage, usage, handling, disposal, or discharge of hazardous materials on the property.

The Director or the Director's designee shall determine that there will be a substantial reduction of the existing risk of pollution from the hazardous materials to the closest public utility potable water supply well only if the Director or the Director's designee makes affirmative findings as to all of the aforesaid factors, and

- (iii) That the owner of the property has submitted to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that the hazardous materials to be used, generated, handled, disposed of, discharged or stored on the property after the proposed replacement, modification or limited expansion is approved by the Director or the Director's designee, pursuant to this section, shall not be more hazardous than the hazardous materials used, generated, han-

dled, disposed of, discharged or stored on the property at the time of the aforesaid approval and which furthermore shall require written notice by the owner of the property to the Department of any change in the kind of hazardous materials on the property after the aforesaid approval. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property.

- (6) *Applicability of travel time ranges within wellfield protection areas.* The Director or the Director's designee shall utilize the following procedures when making a determination under Tables A-1, A-2, A-3, A-4 or B-1:
 - (a) Property wholly located within one (1) travel time range having restrictions shall be governed by the restrictions under that travel time range.
 - (b) Property within two (2) or more travel time ranges having restrictions shall be governed by the total sewage loading for the property. The total sewage loading shall be derived by adding the sewage loading within each travel time range and dividing the resultant amount by the gross acreage for the property.
 - (c) Property within both restricted and unrestricted travel time ranges shall be governed in accordance with Section 24-43(6)(b) herein except that portion of the property outside of the restricted travel time ranges shall be excluded from averaging the applicable restrictions as aforesaid. However, all septic tanks, septic tank drainfields, storm water disposal methods and liquid waste storage,

disposal and treatment methods shall be installed upon the property as far away as is reasonably possible from all potable water supply wells.

- (7) *Excavations.* Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant, or issue any permit, of any kind whatsoever, certificate of completion, platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any excavation within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or the basic wellfield protection area of any public utility potable water supply well, or within one-quarter (1/4) of a mile of the perimeter of the Miami-Dade County 58th Street landfill, United Sanitation landfill, or the resources recovery facility until the County or municipal officer, agent, employee or Board has obtained the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall cause, allow, let, permit or suffer any excavation within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, or within the basic wellfield protection area of any public utility potable water supply well until the person has obtained the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue his written approval only if the Director or the Director's designee determines that the excavation will comply with the following:

- (a) The property upon which the excavation has occurred or will occur and that portion of the property which has not been excavated or will not be excavated shall be provided with protection and security measures to prohibit the handling, disposal of, dis-

charge or storage of hazardous materials, solid waste, or liquid waste in the excavation or on the property which has not been excavated or will not be excavated. Said protection and security shall be subject to the approval of the Director or the Director's designee.

Furthermore, the owner of the property upon which the excavation has occurred or will occur and that portion of the property which has not been excavated or will not be excavated shall submit to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that protection and security measures shall be provided subject to the approval of the Director or the Director's designee. Said covenants shall be executed by the owner of the property upon which the excavation has occurred or will occur and that portion of the property which has not been excavated or will not be excavated in form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property upon which the excavation has occurred or will occur and the property which has not been excavated or will not be excavated, and

- (b) The excavation will not be located within thirty (30) days' travel time from any public utility potable water supply well or within thirty (30) days' travel time from potable water supply wells as set forth on the West Wellfield Interim protection area map(s) and the excavation will not exceed a depth of forty (40) feet below existing grade within the basic

wellfield protection area of any public utility potable water supply well, or

- (c) The excavation will not be located within thirty (30) days' travel time from any public utility potable water supply well and there exists property without excavation which will provide an additional thirty (30) days' travel time between the excavation and any public utility potable water supply well.

Furthermore, the owner of the property upon which the excavation is to occur shall submit to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that the property without excavation aforesaid will not be subject to excavation at any time. Said covenants shall be executed by the owner of the property without excavation aforesaid and in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property upon which the excavation is to occur, or

- (d) The excavation has a valid excavation permit or equivalent municipal permit for excavation and a valid Class IV permit, if required by Article IV of this chapter, which was obtained prior to September 30, 1983, which permits have been valid and continuously in full force and effect since their issuance.
- (8) *Pipelines for hazardous materials.* Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board, after July 13, 1984 shall approve, grant or issue any permit of any kind whatsoever for the installation, modification, or expansion of that

portion of any pipeline used or to be used for the transmission or storage of any hazardous materials and which portion is within the Northwest Wellfield protection area or the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield or Southwest Wellfield or within the basic wellfield protection area of any public utility potable water supply well or, in the case of that portion of any pipeline not within the basic wellfield protection area but within the maximum day pumpage wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield, after December 12, 1986, or, in the case of that portion of any pipeline within the West Wellfield Interim protection area, after the effective date of this ordinance [Ordinance No. 89-80] or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex after the effective date of this ordinance.

Furthermore, notwithstanding any provision of this Code, no person shall install, construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be installed, constructed, utilized, operated or occupied any pipeline or portion of any pipeline used or to be used for the transmission or storage of any hazardous materials within the Northwest Wellfield Protection Area or the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield or Southwest Wellfield or within the basic wellfield protection area of any public utility potable water supply well, after July 13, 1984, unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials before July 13, 1984, or, in the case of the West Wellfield Interim protection area, no person shall install, construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be installed, constructed, utilized, operated or occu-

piped any pipeline or portion of any pipeline used or to be used for the transmission or storage of any hazardous materials within the West Wellfield Interim protection area after the effective date of this ordinance [Ordinance No. 89-80] or, in the case of that portion of any pipeline within the outer wellfield protection zone of the South Miami Heights Wellfield Complex after the effective date of this ordinance unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials prior to the effective date of this ordinance, unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials prior to the effective date of this ordinance [Ordinance No. 89-80].

Furthermore, notwithstanding any provision of this Code, no person shall install, construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any pipeline or portion of any pipeline used or to be used for the transmission or storage of any hazardous materials within the maximum day pumpage wellfield protection area but not within the basic wellfield protection area of the Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield after the effective date of this subsection [December 12, 1986], unless said person installed, constructed, utilized, operated or occupied said pipeline used or to be used for the transmission or storage of hazardous materials before the effective date of this subsection [December 12, 1986].

- (9) *Water conservation restrictions for the protection of the Northwest Wellfield.* The Director or the Director's designee shall evaluate the data from a groundwater elevation monitoring program and a groundwater quality monitoring program for the Northwest Wellfield which pro-

grams shall be conducted by the Department or a contractor designated by the County. If the Director or the Director's designee, after evaluating the aforesaid monitoring data, determines that a reduction in wellfield pumpage is necessary to prevent contamination of the Northwest Wellfield, the Director or the Director's designee shall impose water conservation restrictions in the unincorporated and incorporated areas of Miami-Dade County. These water conservation restrictions shall consist of one (1) of, or any combination of, the following:

- (a) Ordering public utilities owning or operating public water systems to reduce water system pressure.
- (b) Mandatory water conservation restrictions similar to the applicable water use restrictions set forth in the rules of the South Florida Water Management District, Chapter 40E-21, Florida Administrative Code, as may be amended from time to time.

The duration of these water conservation restrictions shall be determined by the Director or the Director's designee after periodic evaluation of wellfield pumpage data and pertinent monitoring program data. The water conservation restrictions in effect may be subsequently changed or rescinded by the Director or the Director's designee after such periodic evaluation.

- (10) *Land uses within the Northwest Wellfield protection area and West Wellfield Interim protection area.* Notwithstanding any provision of this Code, no County officer, agent, employee or board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat) or zoning action (district boundary change, unusual use, use variance, new use, similar use) for any land use within the Northwest Wellfield protection area, or within the West Wellfield Interim protection area, without obtaining the prior written approval of the Director or the Director's

designee. Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use within the Northwest Wellfield protection area or within the West Wellfield Interim protection area without obtaining the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue his written approval only if:

- (a) The Director or the Director's designee determines that the property is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area and the existing land use(s) for the property or the land use(s) requested for the property is one (1) or more of the land uses set forth in Table E-1 and the land use(s) is not a land use found exclusively in the following Miami-Dade County zoning classifications or that the zoning classification requested is not one (1) or more of the following Miami-Dade County zoning classifications:
 - (i) BU-3 (excluding those land uses permitted by BU-1, BU-1A or BU-2),
 - (ii) IU-1,
 - (iii) IU-2,
 - (iv) IU-3,
 - (v) IU-C, or
- (b) The Director or the Director's designee determines that the land use is not listed in Table E-1, the land use(s) is not set forth as a permitted use, special exception, unusual use or conditional use in Chapter 33 of this Code, the land use(s) is not a land use(s) found exclusively in the zoning classifications listed in Sections 24-43(10)(a)(i), (ii), (iii), (iv), (v), above the land use(s) is comparable to a land use(s) set forth in

Table E-1, and the land use(s) will not have an adverse environmental impact on groundwater quality in the North Wellfield protection area and within the West Wellfield protection area. Notwithstanding the foregoing, the Director or the Director's designee shall not determine that the land use is comparable to land use(s) set forth in Table E-1 if the land use is permitted in one (1) or more of the following Miami-Dade County zoning classifications and if the land use is not permitted in one (1) or more Miami-Dade County zoning classifications which are less restrictive than the following BU-3; IU-1; IU-2; IU-3; and IU-C.

- (i) In determining whether a land use is comparable to one (1) or more land use(s) set forth in Table E-1, the Director or the Director's designee shall consider the following factors:
 1. The materials used, handled and stored, and the products and wastes produced;
 2. The activities, processes and methods which are employed and utilized;
 3. The machinery and other facilities utilized and maintenance requirements of said machinery and facilities;
 4. Uses commonly attendant to or associated with the primary use.
- (ii) In determining whether a land use does not or will not have an adverse environmental impact on the groundwater quality in the Northwest Wellfield protection area or within the West Wellfield protection area, the Director or the Director's designee shall consider the following factors:
 1. The land use will not be detrimental to the public

health, welfare and safety and will not create a nuisance and will not materially increase the level of water pollution within the Northwest Wellfield protection area or within the West Wellfield Interim protection area;

2. The use, generation, handling, disposal of, discharge or storage of hazardous materials will not occur within the Northwest Wellfield protection area or within the West Wellfield Interim protection area;
3. The only liquid waste (excluding stormwater) which will be generated, disposed of, discharged, or stored within the Northwest Wellfield protection area or within the West Wellfield Interim protection area shall be domestic sewage discharged to a public sanitary sewer or septic tank;
4. Stormwater runoff shall be retained on the property and disposed of through infiltration drainage systems supplemented with seepage drainage systems, or

- (c) The Director or the Director's designee, determines that: The property is within the Northwest Wellfield protection area or within the West Wellfield Interim protection area; the owner of the property is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to December 12, 1986, in the case of the Northwest Wellfield protection area,

or August 6, 1989, in the case of the West Wellfield Interim protection area, which permit has been valid and continuously in full force and effect since its issuance; the property is served or will be served by a public water main and public sanitary sewer no later than the date that the original certificate of use and occupancy or original municipal occupational license is issued; and the property is in compliance with Sections 24-43(4), (5) and (6) of this Code and was in compliance with Sections 24-43(4), (5) and (6) of this Code no later than the date of issuance of the aforesaid valid building permit.

TABLE E-1

Allowable Land Uses Within the Northwest Wellfield Protection Area and Within the West Wellfield Interim Protection Area

Land Use

- Abstract title
- Accounts, bookkeeping
- Actuaries
- Advertising office only; no printing
- Agricultural use
- Alcoholic beverage district, sales
- Amusement, game room
- Animals, birds, and tropical fish, retail only
- Antique shops
- Apparel sales, rentals
- Apartment house
- Appliance and fixture sales (no service)
- Appraisers (no merchandise)
- Archery range
- Art gallery
- Art goods and bric-a-brac shops
- Artist studios
- Auction sales (no hazardous materials)
- Auditoriums

Bait and tackle shop	Cold storage warehouses and pre-cooling plants
Bakeries, retail	Colleges (no hazardous materials)
Bakeries, wholesale	Computer service
Banks	Concrete, cement, clay products—Storage and sales (no vehicle maintenance; no on-site fuel storage)
Barbecue restaurants, stands, pits (wood for cooking) drive-in theaters	Confectionery (and ice cream stores)
Barbershop	Conservatories
Bars	Convent
Baseball field	Convention halls
Bath and massage parlors	Costuming shops
Bathing beaches	Curio stores
Bicycle sales (no service)	Dance halls, schools, academies
Billiard parlor/pool hall	Day camp
Bindery (books, publications, etc.)	Day care, nursery
Bingo	Department store
Boat piers, docks	Dependent children (home for)
Book store (new and used)	Drive shop
Bottled gas storage (liquefied petroleum gas and natural gas only)	Docks, piers—Boat
Bowling alleys	Dog obedience training, training tracks, schools
Box lunches—Wholesale and retail with delivery trucks (no truck maintenance)	Dormitories
Broadcasting studios (radio and TV, including transmitting station and tower, incidental electrical generation by LP or natural gas only)	Drapery stores, drapery making
Business machines sales (typewriters, calculators, etc.) (no service)	Dressed poultry and sea food stores
Camps	Drive-through banks and restaurants
Card club/public	Drug store
Card shops	Dry cleaning (no cleaning on premises)
Carpet sales	Dynamite storage
Caterers	Electric substations
Churches	Electrolysis office (removal of hair by electrolytic process)
Cigar making and sales	Employment agencies
Cigarette vending	Entrance gates
Clubs (private)	Escort service
Coin laundries (no dry cleaning machines)	Farms
Coin shop	Fire station (no hazardous materials)
	Fishing camps
	Fish houses, market, smoking

- Fish, tropical, aquariums (retail sales only)
- Flea market
- Florist shops
- Flower importers
- Food distribution (no on-site vehicle maintenance)
- Food sales
- Foster home
- Fraternities
- Fruit packing, fruit stores, fruit stands
- Furniture sales, rental and storage (no restoration, no manufacturing)
- Furriers (sales and storage)
- Garment manufacturing (no dyeing)
- Gas (natural gas, LP gas including distribution system and bottling plant)
- Gift stores
- Glass blowing
- Golf course, clubhouse
- Golf driving range
- Grocery store
- Gun shop
- Haberdashery
- Hall for hire
- Handball court
- Health spa
- Homes for dependent children
- Hotels, motels
- Houses of worship
- Ice cream stores
- Ice manufacturing, distributing (emergency electrical generation by LP or natural gas only)
- Import-export office
- Insurance office
- Interior decorators office, showroom
- Jai alai
- Jewelry sales (no manufacturing)
- Judo and karate instructions
- Key shop
- Kindergartens, day care
- Lake excavation
- Laundries (all types, no dry cleaning)
- Leather goods stores (retail)
- Libraries (public)
- Limestone quarrying, rock crushing and aggregate plants ancillary to section in connection with limestone quarrying (no on-site fuel storage except that the use of fuels and lubricants and LP and natural gas storage are permitted)
- Liquefied petroleum (LP) gas
- Liquor package stores
- Livery stable
- Lodges (private)
- Lounges
- Luggage sales
- Lunches (packaging, catering)
- Mail order office
- Massage parlor
- Meat market
- Men's store
- Messenger office
- Milk store (drive-in)
- Miniature golf course
- Mission
- Mobile homes
- Mobile homes, sales (no manufacturing or repair; and no motor homes or recreational vehicles)
- Monastery
- Motel
- Modeling (agencies, schools)
- Motion picture studio (no film developing)
- Motion picture theatre, indoor and outdoor
- Motion pictures and equipment, sales and rental (no equipment servicing, no film developing)

Moving and storage company (no on-site vehicle maintenance)	Racquet ball clubs
Municipal recreation building	Radio, broadcasting station, studio, transmitting station/tower (emergency electrical power by LP or natural gas only)
Museums, public	Railroad and bus passenger stations (no freight terminal, no vehicle maintenance)
Music stores, teaching	Real estate office
Newsstand	Recording studios
Night club	Recreational facilities
Notions sales	Rentals (household equipment, appliances, tools, hardware, etc.) (no hazardous materials)
Office building	Residential uses
Office, professional	Restaurants, including outdoor patios and service
Open air theaters	Retirement villages
Optical stores	Rifle, pistol range
Package stores	Rock and sand yards
Palmistry	Rock yards (crushing)
Paneling (wall/retail sales)	Saloons and bars
Paper salvage	Savings and loan associations
Park or playground, public or private	Schools (no hazardous materials)
Parking lot, parking garage (no auto pound, no tow yard, no on-site vehicle repair)	Seafood stores
Passenger stations (railroad, bus)	Secondhand stores (inside only)
Pawn shops (swap shops)	Shoe store (no manufacturing)
Pet shops, retail sales only (in air conditioned building)	Shooting gallery
Pharmaceuticals (retail)	Shooting range, trap and skeet
Photographic studio (no developing, no printing)	Shopping center (no hazardous materials)
Pillow renovating	Showrooms, salesrooms (no hazardous materials)
Plant sales (no propagation)	Skating rink
Plaster products	Sororities
Plasterers, storage area	Souvenir stores
Police station	Sporting goods store
Pool rooms	Stationery stores
Post office	Storage warehouse (no hazardous materials)
Pottery (retail sales only/no manufacturing)	Swap shops
Private clubs	Swimming pools
Produce or fruit market	
Professional and semiprofessional offices (no medical laboratory or clinic)	
Public art galleries, museums	

Synagogues
 Tailor shops
 Tattoo parlor
 Telegraph stations (emergency electrical power by LP or natural gas only)
 Telephone answering service
 Telephone exchange
 Television (broadcasting studio)
 Tennis courts
 Textile sales
 Theaters
 Tile sales (no manufacturing)
 Tourist attractions (no hazardous materials)
 Trading post
 Trailer park
 Travel agency
 Upholstery shop
 Utilities: Public and private water production, treatment and distribution facilities; and sewage except that wastewater treatment plants are not permitted (emergency electrical power by LP or natural gas only)
 Vegetable stands
 Wall paper, paneling (retail sales)
 Warehouses (storage of food, fodder, apparel, and other nonhazardous materials)
 Watchman's quarters
 Water tanks or towers
 Water treatment plants (emergency electrical power by LP or natural gas only)
 Wearing apparel stores (sales, rentals)
 Wholesale salesrooms and attendant storage rooms (no hazardous materials)

- (11) *Prohibition of resources recovery and management facility within wellfield protection areas.* Notwithstanding any provision of this Code, no County or municipal

officer, agent, employee or Board shall approve, grant, modify or issue any permit (except for renewal of valid operating permits, issued pursuant to this chapter, no later than March 12, 1987), certificate of use and occupancy (except for changes in ownership), platting action (final plan, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any resource recovery and management facility within the Northwest Wellfield protection area or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield, or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well after December 12, 1986, unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to June 25, 1986 and obtained a valid operating permit issued pursuant to this chapter no later than March 12, 1987 or, in the case of a resource recovery and management facility within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, was in operation and had obtained all other applicable permits prior to the effective date of this ordinance.

Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant, modify or issue any permit (except for renewal of valid operating permits issued pursuant to this chapter, renewed no later than ninety (90) days after the effective date of this ordinance [Ordinance No. 89-80]), certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent

municipal zoning action) for any resource recovery and management facility (unless the facility's primary purpose is to collect paper, glass, plastics or aluminium for transport out of the West Wellfield Interim protection area or the facility provides composting for on-site organic plant materials at plant nurseries) within the West Wellfield Interim protection area after the effective date of this ordinance [Ordinance No. 89-80], unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to the effective date of this ordinance [Ordinance No. 89-80] and obtained a valid operating permit issued pursuant to this chapter no later than ninety (90) days after the effective date of this ordinance [Ordinance No. 89-80].

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any resource recovery and management facility within the Northwest Wellfield protection area or within the maximum day pumpage wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield,

or Hialeah Wellfield, or within the basic wellfield protection area of any public utility potable water supply well after December 12, 1986, unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to June 25, 1986 and obtained a valid operating permit pursuant to this chapter, no later than March 12, 1987 or, in the case of a resource recovery and management facility within the outer wellfield protection zone of the South Miami Heights Wellfield Complex, was in operation and had obtained all other applicable permits prior to the effective date of this ordinance.

Notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any resources recovery and management facility within the West Wellfield Interim protection area after the effective date of this ordinance [Ordinance No. 89-80], unless said resource recovery and management facility was in operation and had obtained all other applicable permits prior to the effective date of this ordinance [Ordinance No. 89-80] and obtained a valid operating permit pursuant to this chapter, no later than ninety (90) days after the effective date of this ordinance [Ordinance No. 89-80].

TABLE A-1 Residential Property Served by Septic Tank and Using Public Water Supply

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>	<i>Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>
More than 100 days but not exceeding 210 days	850	As allowed by Section 24-43.1
More than 30 days but not exceeding 100 days	600	850
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches in Class II silica sand under drainfield	600 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>	<i>Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of Class II silica sand under drainfield	350 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

TABLE A-2 Residential Property Served by Septic Tank and Not Using Public Water Supply

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>	<i>Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>
More than 100 days	750 with minimum of 24 inches of Class II silica sand under drainfield	750 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 30 days but not exceeding 100 days	600 with minimum of 24 inches of Class II silica sand under drainfield	750 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of Class II silica sand under drainfield	600 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of Class II silica sand under drainfield	350 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

TABLE A-3 Nonresidential Property Served by Septic Tank, Using Public Water Supply, and Not Using, Generating, Handling, Disposing, Discharging or Storing Hazardous Materials

TABLE INSET:

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>	<i>Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>
More than 100 days but not exceeding 210 days	850	1,500
More than 30 days but not exceeding 100 days	600	850
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of Class II silica sand under drainfield	600 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of Class II silica sand under drainfield	350 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

TABLE A-4 Nonresidential Property Served by Septic Tank, Not Using Public Water Supply, and Not Using, Generating, Handling, Storing, Disposing or Discharging Hazardous Materials

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>	<i>Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>
More than 100 days	750 with minimum of 24 inches of Class II silica sand under drainfield	750 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 30 days but not exceeding 100 days	600 with minimum of 24 inches of Class II silica sand under drainfield	750 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of Class II silica sand under drainfield	600 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of Class II silica sand under drainfield	350 with minimum of 24 inches of Class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

TABLE B-1 Residential Property Served by Sanitary Sewers; Nonresidential Property Served by Sanitary Sewers and Not Using, Generating, Handling, Disposing, Discharging or Storing Hazardous Materials

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>	<i>Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)</i>
More than 30 days	No additional restrictions	No additional restrictions
More than 10 days but not exceeding 30 days	1600	No additional restrictions
More than 100 feet but not exceeding 10 days	850	1600
100 feet or less	0	0

TABLE C-1 Allowable Storm Water Disposal Methods for Residential and Nonresidential Property

<i>Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well</i>	<i>Allowable Methods for Storm Water Disposal</i>
More than 30 days but not exceeding 210 days	Infiltration or seepage or overflow outfalls only
More than 10 days but not exceeding 30 days	Infiltration or seepage only
More than 100 feet but not exceeding 10 days	Infiltration only
100 feet or less	None

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-125, § 3, 9-12-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-43.1. Liquid waste disposal and potable water supply systems.

(1) The intent and purpose of this section is to safeguard the public health, safety, and welfare by regulating liquid waste storage, disposal and treatment methods other than sanitary sewers and any source of potable water supply.

(2) No person shall discharge or cause, allow, permit, let or suffer to be discharged any liquid waste or other substance of any kind whatsoever into a septic tank other than domestic sewage.

(3) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any residential land use served or to be served by a septic tank or any source of potable water supply until the County or municipal officer, agent, employee or Board affirmatively determines that the residential land use will comply with one (1) or more of the requirements as set forth in Sections 24-43.1(3)(a), (b), (c), (d), (e), and (f) and Section 24-43.2(1) of this Code, and, additionally, that the property is not within a feasible distance for a public water main or public sanitary sewers.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any residential land use served or to be served by a septic tank or any source of potable water supply until the County or municipal officer, agent, employee or Board affirmatively determines that the residential land use will comply with one (1) or more of the requirements set forth in Sections 24-43.1(3)(a), (b), (c), (d), (e) and (f) and Section

24-43.2(1) of this Code, and, additionally, that the property is not within a feasible distance for a public water main or public sanitary sewers.

- (a) Where public water is used:
 - (i) The minimum lot size for a single-family residence shall be fifteen thousand (15,000) square feet of unsubmerged land;
 - (ii) The minimum lot size for a duplex residence shall be twenty thousand (20,000) square feet of unsubmerged land;
 - (iii) The maximum sewage loading for all other residential uses shall be one thousand five hundred (1,500) gallons per day per unsubmerged acre; or
- (b) Where public water is not used:
 - (i) The minimum lot size for a single-family residence shall be twenty thousand three hundred twenty-eight (20,328) square feet of unsubmerged land;
 - (ii) The minimum lot size for a duplex residence shall be twenty-nine thousand forty (29,040) square feet of unsubmerged land;
 - (iii) The maximum sewage loading for all other residential uses shall be seven hundred fifty (750) gallons per day per unsubmerged acre; or
- (c) In the case of a property owner who has requested to use a tract of land for a single-family residence or duplex residence but which tract of land fails to comply with the minimum lot size requirements of Section 24-43.1(3)(a)(i) or Section 24-43.1(3)(a)(ii) hereof and a public right-of-way containing an available and operative public water main or easement containing an available and operative public water main abuts said tract of land, the Director or the Director's designee has issued his written approval for the use of a septic tank for such single-family residence or duplex residence. The Director or the Director's designee shall issue his

- written approval only if he finds that said tract of land was created by deed prior to January 1, 1958, or was created by plat approved by the governmental authorities having jurisdiction prior to January 1, 1972, provided that said tract of land, as created by the originally recorded plat or originally recorded deed, has continuously remained in the same form as set forth in the originally recorded plat or deed, or
- (d) The Director or the Director's designee has issued his written approval for any residential land use served or to be served by a public water main and a septic tank. The Director or the Director's designee shall issue his written approval only if he finds the following:
- (i) That extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) That more than fifty (50) percent of an area, consisting of a minimum of one-quarter ($\frac{1}{4}$) mile square extending a minimum of one-eighth ($\frac{1}{8}$) of a mile radially from the perimeter of the property, contains land uses served by septic tank(s) and a public water supply, and
 - (iii) That the property complies with the minimum lot size requirements and the maximum lot size requirements and the maximum daily domestic sewage flow (sewage loading) requirements of Chapter 10D-6 of the State of Florida Rules of the Department of Health and Rehabilitative Services as same may be amended from time to time, or has obtained a variance from the aforementioned requirements of Chapter 10D-6, and
 - (iv) The property was part of a recorded subdivision which was created by plat or deed but said subdivision has not continuously remained as a legally recorded subdivision and the size of each proposed lot is the same or larger than the lots set forth in the recorded subdivision, and
- (v) That if the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the basic wellfield protection area of any public utility potable water supply well, the property complies with Section 24-43(4)(a) and Section 24-43(4)(d) of this Code, and
- (vi) That residential land uses other than a single-family residence or a duplex residence shall be in compliance with Sections 24-43.1(3)(a)(iii), or
- (e) The Director or the Director's designee has issued the Director's or the Director's designee's written approval for a platting action (final plat, waiver of plat, or equivalent municipal platting action) for a residential subdivision which was in existence prior to the effective date of this subsection served or to be served by a public water main and septic tanks. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only if the Director or the Director's designee finds the following:
- (i) The extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) The original subdivision was created by deed prior to January 1, 1958, or was created by plat prior to January 1, 1972, provided that said tract of land, as created by the originally recorded plat or deed, has continuously remained in the same form as set forth in the originally recorded plat or deed, and
 - (iii) The individual lots created by the platting action fail to comply with

the minimum lot size requirements of Sections 24-43.1(3)(a)(i) or Section 24-43.1(3)(a)(ii) hereof, and

- (iv) The proposed subdivision of the originally recorded plat or deed will result in a subdivision containing less than or equivalent number of lots as the original subdivision described in subsection Section 24-43.1(3)(e)(ii), and
- (v) That residential land uses other than a single-family residence or a duplex residence shall be in compliance with Section 24-43.1(3)(a)(iii), or
- (f) The Director or the Director's designee has issued the Director's or the Director's designee's written approval for a platting action (final plat, waiver of plat or equivalent municipal platting action) for a residential subdivision which was not in existence prior to the effective date of this subsection which subdivision is served or to be served by a public water main and septic tanks. The Director or the Director's designee shall issue the Director's or the Director's designee's written approval only if the Director or the Director's designee finds the following:
 - (i) The extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) The number of lots in the subdivision created by the platting action is derived by dividing the gross area of the property by the minimum lot size for a single-family residence or duplex residence as set forth in Sections 24-43.1(3)(a)(i) and 24-43.1(3)(a)(ii) hereof, and
 - (iii) At least one-fourth ($\frac{1}{4}$) of the lots in the subdivision exceed the minimum lot size requirements set forth in Section 24-43.1(3)(a)(i) and Section 24-43.1(3)(a)(ii) hereof and the remaining three-fourths ($\frac{3}{4}$) of the lots

are equal to or exceed ninety-five (95) percent of the lot size requirement set forth in Sections 24-43.1(3)(a)(i) and Section 24-43.1(3)(a)(ii).

In calculating the square footage of lots in Sections 24-43.1(a), (b), (c), (d), (e) and (f) above, abutting easements and rights-of-way shall be considered to the center lines thereof.

(4) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit (except building permits for repair and maintenance of existing facilities), certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any nonresidential land use served or to be served by any source of potable water supply and a septic tank without obtaining the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy, or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any nonresidential land use served or to be served by any source of public water supply and a septic tank without obtaining the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue the Director's or the Director's designee's written approval if the only liquid waste (excluding liquid wastes associated with the processing of agricultural produce in agricultural packing houses and liquid wastes associated with agricultural vehicle or, agricultural equipment maintenance facilities, stormwater and water used within a self-contained water recycling car wash facility, provided said facility does not backwash the recycling filters) which shall be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged into a septic tank

and additionally, that the property is not within a feasible distance for public water mains and public sanitary sewers, and only:

- (a) After the owner of the property (excluding property upon which an agricultural vehicle or agricultural equipment maintenance facility operates) submits to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that the only liquid waste (excluding liquid wastes associated with the processing of agricultural produce in agricultural packing houses and liquid wastes associated with agricultural vehicle or agricultural equipment maintenance facilities, stormwater and water used within a self-contained water recycling car wash facility, provided said facility does not backwash the recycling filters) which shall be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged into a septic tank. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded by the Department at the expense of the owner of the property; and
- (b) If the Director or the Director's designee determines that the proposed nonresidential land use is in accordance with the following:
 - (i) Where public water is used the maximum allowable sewage loading shall be one thousand five hundred (1,500) gallons per day per unsubmerged acre, or
 - (ii) Where public water is not used the maximum allowable sewage loading shall be seven hundred fifty (750) gallons per day per unsubmerged acre.

In calculating the square footage of lots in Sections 24-43.1(b)(i) and (ii) above, abutting easements and rights-of-way shall be considered to the center lines thereof; and

- (c) If the Director or the Director's designee determines that the existing nonresidential land use for the property or the nonresidential land use requested for the property is served or to be served by an on site domestic well system and a septic tank and is not one (1) or more of the following nonresidential land uses:
 - (i) Establishments primarily engaged in the handling of food and drink except factory prepackaged products and agricultural crops,
 - (ii) Educational institutions,
 - (iii) Intermediate care facilities,
 - (iv) Health care facilities.

Notwithstanding the above, the Director or the Director's designee shall approve the issuance of a building permit for the repair or maintenance of existing facilities.

(5) The following table shall be utilized by the Director or the Director's designee to determine sewage flows for sanitary sewers and the maximum allowable septic tank sewage loading requirements set forth in this chapter. If the Director or the Director's designee receives competent factual data and information such as actual on-site measured sewage flows or actual metered water bills, the Director or the Director's designee may utilize this data and information to determine sewage flows for sanitary sewers and the maximum allowable septic tank sewage loading requirements set forth in this chapter in lieu of the table below. This table shall not be utilized for the sizing of septic tanks. Sizing of septic tanks shall be in accordance with Florida Statutes regarding septic tanks.

Type of Land Use, Gallons Per Day (GPD)

Residential Land Uses:

Single-family residence:	350 (GPD/unit)
Townhouse residence:	250 (GPD/unit)
Apartment residence:	200 (GPD/unit)
Mobile home residence:	300 (GPD/unit)

Duplex or twin home residence: 250 (GPD/unit)

Commercial Land Uses:

Barbershop: 10/100 (GPD/sq. ft.)

Beauty salon or hair boutique: 75 (GPD/chair)

Bowling alley: 100 (GPD/lane)

Dentist's office:

(a) Per dentist: 250 (GPD/dentist)

(b) Per wet chair: 200 (GPD/chair)

Physician's office: 250 (GPD/physician)

Full service restaurant (350 GPD minimum): 50 (GPD/seat)

Bar or cocktail lounge: 15 (GPD/seat)

Fast food restaurant (350 GPD minimum): 35 (GPD/seat)

Take-out restaurant (350 GPD minimum); 50/100 (GPD/sq. ft.)

Hotel or motel: 100 (GPD/room)

Office building: 10/100 (GPD/sq. ft.)

Motor vehicle service station: 10/100 (GPD/sq. ft.)

Shopping center (dry uses): 5/100 (GPD/sq. ft.)

Stadium, racetrack, ballpark: 3 (GPD/seat)

Store without food service: 5/100 (GPD/sq. ft.)

Theater:

(a) Indoor auditorium: 3 (GPD/seat)

(b) Outdoor drive-in: 5 (GPD/space)

Camper or trailer park: 150 (GPD/space)

Banquet halls: 25 (GPD/seat)

Car wash:

(a) Recycling-type: 750 (GPD/bay)

(b) Hand-type: 3,500 (GPD/bay)

Coin laundries: 225 (GPD/washer)

Country clubs: 25 (GPD/member)

Funeral homes: 10/100 (GPD/sq. ft.)

Gas station/mini-mart: 450 (GPD/unit)

Health spa/gyms: 35/100 (GPD/sq. ft.)

Veterinarian's office:

(a) Per veterinarian: 250 (GPD/vet)

(b) With kennels: 30 (GPD/cage)

Kennels: 30 (GPD/cage)

Marinas: 40 (GPD/slip)

Food preparation outlets (bakeries, meat markets, commissaries) (350 GPD minimum): 50 (GPD/sq. ft.)

Pet grooming:

(a) Store space: 10/100 (GPD/sq. ft.)

(b) Per tub: 75 (GPD/tub)

Industrial Land Uses:

Factory without showers: 10/100 (GPD/sq. ft.)

Factory with showers: 20/100 (GPD/sq. ft.)

Airport: 5 (GPD/passenger); 10 (GPD/employee)

House of worship: 3 (GPD/seat)

Hospital: 250 (GPD/bed)

Convalescent or nursing home: 150 (GPD/bed)

Park:

(a) With toilets only: 5 (GPD/person)

(b) With showers and toilets: 20 (GPD/person)

Other residential institution or facility (including adult congregate living units): 100 (GPD/person)

School:

(a) Day care/nursery: 5 (GPD/student)

(b) Regular school: 10 (GPD/student)

(c) With cafeteria add: 5 (GPD/student)

(d) With showers add: 5 (GPD/student)

(e) Teachers and staff: 15 (GPD/person)

Public swimming facility: 10 (GPD/person)

Warehouse/industrial speculation building: 20/1000 (GPD/sq. ft.)

Storage warehouse or mini-warehouse: 5/1000 (GPD/sq. ft.)

(6) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee, or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any nonresidential land use served or to be served by any liquid waste storage, disposal or treatment method other than public sanitary sewers or any source of potable water supply other than a public water main without obtaining the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any nonresidential land use served by any liquid waste storage, disposal or treatment method other than public sanitary sewers or any source of potable water supply other than a public water main without obtaining the prior written approval of the Director or the Director's designee.

The Director or the Director's designee shall issue his written approval only if:

- (a) The Director or the Director's designee determines that the existing nonresidential land use for the property or the nonresidential land use for the property is a nonresidential land use served or to be served by a public water main and is not

one (1) or more of the nonresidential land uses permitted under the following Miami-Dade County zoning classifications:

(i) BU-1A (excluding those land uses permitted by BU-1),

(ii) BU-2 (excluding those land uses permitted by BU-1),

(iii) BU-3 (excluding those land uses permitted by BU-1),

(iv) IU-1,

(v) IU-2,

(vi) IU-3,

(vii) IU-C, or

- (b) The Director or the Director's designee determines that the existing nonresidential land use for the property or the nonresidential land use requested for the property is a nonresidential land use served or to be served by an on site domestic well system and is not an establishment primarily engaged in the handling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities and health care facilities and is not one (1) or more of the nonresidential land uses permitted under the following Miami-Dade County zoning classifications:

(i) BU-1A (excluding those land uses permitted by BU-1 except an establishment primarily engaged in the handling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities and health care facilities),

(ii) BU-2 (excluding those land uses permitted by BU-1 except an establishment primarily engaged in the handling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities and health care facilities),

(iii) BU-3 (excluding those land uses permitted by BU-1 except an establishment primarily engaged in the han-

dling of food and drink (except factory prepackaged products), educational institutions, intermediate care facilities, and health care facilities),

- (iv) IU-1,
 - (v) IU-2,
 - (vi) IU-3,
 - (vii) IU-C,
 - (viii) Unusual uses (excluding fruit and vegetable stands (no food or drinks processing) on a seasonal basis; lake excavation; concrete batching plant; concrete block plant; rock crushing and screening plant; filling of rock pits; rock quarries; radio and television towers and transmitting stations; trailers as watchman's quarters), or
- (c) The owner of the property submits to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which provides that prior to the approval, granting or issuance of any building permit, certificate of use and occupancy (except for changes in ownership) or municipal occupational license (except for changes in ownership) the property shall be connected to a public water main and a public sanitary sewer. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenant shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property, or
- (d) An application has been filed for certificate of use and occupancy or municipal occupational license for a land use served or to be served by a public water main and any liquid waste storage, disposal or treatment method approved prior to September 30, 1983, or, an application has been filed for a certificate of use and occupancy or municipal occupational license for a land use served or to be served by an on site domestic well system and any liquid waste storage, disposal or treatment method other than public sanitary sewers approved prior to June 13, 1986, or
- (e) The Director or the Director's designee determines that the property is served or to be served by a public water main and is served or to be served by any liquid waste storage, disposal or treatment method other than public sanitary sewers, is in compliance with Sections 24-43.1(4)(a) and (b), and that the existing nonresidential land use for the property or the nonresidential land use requested for the property is one (1) or more of the nonresidential land uses permitted under the Miami-Dade County zoning classifications set forth in Sections 24-43.1(6)(a)(i), (ii), or (iii) above, and the owner of the property has executed a covenant running with the land in favor of Miami-Dade County which provides that the property shall only be used for those nonresidential uses permitted under Miami-Dade County zoning classification BU-1 until such time as the property is connected to public sanitary sewers. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida by the Department at the expense of the owner of the property, or
- (f) The Director or the Director's designee determines that the property is served or is to be served by an on site domestic well system and is served or to be served by any liquid waste storage, disposal or treatment method other than public sanitary sewers, is in compliance with Sections 24-43.1(4)(a), (b) and (c), and that the existing nonresidential land use for the property or the nonresidential land use requested for the property is one (1) or more of the nonresidential land uses permitted under the Miami-Dade County zoning classifications set forth in Sections 24-43.1(6)(b)(i), (ii), or (iii) above, and the owner of the property has executed a

covenant running with the land in favor of Miami-Dade County which provides that the property shall only be used for those nonresidential uses permitted under Miami-Dade County zoning classification BU-1 (excluding establishments primarily engaged in the handling of food and drink, except factory prepackaged products, educational institutions, intermediate care facilities and health care facilities) until such time as the property is connected to a public water main and a public sanitary sewer. Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be recorded in the public records of Miami-Dade County, Florida, by the Department at the expense of the owner of the property, or

- (g) The Director or the Director's designee determines that no portion of the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the owner of the property is applying for a land use prohibited by Section 24-43.1(6)(a) above, and:
- (i) That extension of public sanitary sewers to serve the property from the nearest available point of connection to an available public sanitary sewer is not within a feasible distance for public sanitary sewers, and
 - (ii) That more than fifty (50) percent of an area, consisting of a minimum of one-quarter ($\frac{1}{4}$) mile square extending a minimum of one-eighth ($\frac{1}{8}$) of a mile radially from the perimeter of

the property, contains land uses served by septic tank(s) and public water, and

- (iii) That the property complies with Sections 24-43.1(4)(a) and (b), and
- (iv) That if the nonresidential land use will handle, use, or store hazardous materials on the property then the water pollution prevention and abatement measures and practices set forth in Sections 24-43(5)(a)(i), (ii), (iii), (iv), and (v) of this Code shall be provided. Said water pollution prevention and abatement measures and practices shall be subject to the approval of the Director or the Director's designee, and
- (v) That the owner of the property submits to the Director or the Director's designee a covenant running with the land executed by the owner of the property in favor of Miami-Dade County which sets forth the nonresidential land uses to be allowed on the property served by septic tank(s). Said covenant shall only include the nonresidential land uses permitted by the existing Miami-Dade County or municipal zoning classification for the property or permitted by the Miami-Dade County or municipal zoning classification requested by the owner of the property and which are determined by the Director or the Director's designee to generate, dispose of, discharge, or store only domestic sewage discharged into a septic tank and not to generate, dispose of, discharge, or store any other liquid waste except storm water or water used within a self-contained water recycling car wash facility, provided said facility does not backwash the recycling filters.

Said covenants shall be in a form(s) prescribed by the Director and approved by the Board of County Commissioners. The covenants shall be

recorded by the Department at the expense of the owner of the property, and

- (vi) That the property is served or is to be served by a public water supply, or
- (h) The Director or the Director's designee determines that no portion of the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the owner of the property is applying for a land use prohibited by Section 24-43.1(6)(b)(i), (ii), and (iii) above, and:
 - (i) That extension of a public water main and public sanitary sewer(s) to serve the property from the nearest available point of connection to an available public water main and public sanitary sewers is not within a feasible distance for public water mains and public sanitary sewers.
 - (ii) That the property complies with Sections 24-43.1(4)(a), (b) and (c), and 24-43.1(6)(g)(v), and 24-43.2(1).
 - (iii) That the nonresidential land use will not use, generate, handle, dispose of, discharge or store hazardous materials on the property.
 - (iv) That the nonresidential land use(s) will not have an adverse environmental impact on groundwater quality within the property.

In determining whether a land use does not or will not have an adverse environmental impact on the groundwater quality within the property,

the Director or the Director's designee shall consider the following factors:

1. The land use will not be detrimental to the public health, welfare and safety and will not create a nuisance and will not materially increase the level of water pollution within the property;
 2. The use, generation, handling, disposal of, discharge or storage of hazardous materials will not occur on the property;
 3. The only liquid waste (excluding stormwater) which will be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged to a public sanitary sewer or septic tank;
 4. Stormwater runoff shall be retained on the property and disposed of through infiltration drainage systems supplemented with seepage drainage systems, or
- (i) The Director or the Director's designee determines that no portion of the property is located within the Northwest Wellfield protection area or within the West Wellfield Interim protection area or within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the property is located within the boundaries of a sanitary sewer improvement district approved by the Board of County Commissioners or a municipal governing body, that the owner of the

property is applying for a land use prohibited by subsection Section 24-43.1(6)(a) above, and

- (i) That the property is served or will be served by a public water supply, and
- (ii) That the property complies with the requirements of Section 24-43.1(4)(b), and

(iii) That if the nonresidential land use will generate, handle, store or use hazardous waste on the property then the water pollution prevention and abatement measures and practices listed below shall be provided. Said water pollution prevention and abatement measures and practices shall be subject to the approval of the Director or the Director's designee.

1. Monitoring of groundwater, and
2. Secondary containment of hazardous wastes stored on the property, and
3. Disposal of hazardous wastes by a liquid waste transporter with a valid liquid waste transporters operating permit issued by the Director, and
4. Inventory control and recordkeeping of hazardous wastes generated or stored on the property, and
5. Stormwater management.

(iv) That if the nonresidential land use will generate, handle, use or store liquid wastes (excluding hazardous wastes and domestic sewage) on the property then the best management practices listed below shall be provided. Said best management practices shall be subject to the approval of the Director or the Director's designee.

1. Disposal of liquid wastes, other than domestic sewage, by a liquid waste transporter with a

valid liquid waste transporter operating permit issued by the Director, and

2. Inventory control and record keeping of liquid wastes, other than domestic sewage, generated and stored on the property.

(j) The Director or the Director's designee determines that the property is located within the maximum day wellfield protection area of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights Wellfield Complex or within the basic wellfield protection area of any public utility potable water supply well, that the property is located within the boundaries of a sanitary sewer improvement district approved by the Board of County Commissioners or a municipal governing body, that the owner of the property is applying for a land use prohibited by Section 24-43.1(6)(a) above, and

(i) That the property is served or is to be served by a public water supply, and

(ii) That the property complies with Section 24-43.1(4)(b), and

(iii) That the property complies with the requirements of Sections 24-43(5)(a), (b), and (c), and

(iv) That if the nonresidential land use will handle, generate, store, or dispose of liquid wastes (excluding hazardous wastes), other than domestic sewage discharged to a septic tank, on the property, then the following best management practices shall be provided:

1. Monitoring of groundwater, and

2. Secondary containment of liquid wastes stored on the property, and
3. Disposal of liquid wastes by a liquid waste transporter with a valid liquid waste transporter operating permit issued by the Director, and
4. Inventory control and recordkeeping of liquid wastes other than domestic sewage discharged to a septic tank, and
5. Stormwater management.

Said best management practices shall be subject to the approval of the Director or the Director's designee, and

(7) Notwithstanding any provision of this Code, when an approved public gravity sanitary sewer or approved sanitary sewer force main is available and operative in a public right-of-way or easement abutting the property, the use of any liquid waste storage, disposal or treatment methods shall cease within ninety (90) days of the date that the Director or the Director's designee determines that the approved public sanitary sewer is available and operative. Thereafter, all liquid wastes that are generated, handled, disposed of, discharged or stored on the property shall be discharged to an approved and operative gravity sanitary sewer or approved sanitary sewer force main except those liquid wastes, other than domestic sewage, that are permitted by this chapter to be generated, handled, treated or stored on the property. Notwithstanding the foregoing, graywater may, at the option of the property owner, be discharged to a graywater disposal system approved by the Director or the Director's designee.

(8) Notwithstanding any provision of this Code, the use of any liquid waste storage, disposal or treatment methods (excluding public sanitary sewers and stormwater disposal methods) for any nonresidential land use within the Northwest Wellfield protection area, within the West Wellfield Interim protection area, the maximum day pumpage wellfield protection areas of the Alexander Orr Wellfield, Snapper Creek Wellfield, Southwest Wellfield, Miami Springs Lower Wellfield, Miami Springs Upper Wellfield, John E. Preston

Wellfield or Hialeah Wellfield or within the outer wellfield protection zone of the South Miami Heights wellfield complex or within the basic wellfield protection area of any public utility potable water supply well shall cease within six (6) months from the date that the Director or the Director's designee determines that an approved public gravity sanitary sewer has been made available and operative in any portion of the public right-of-way or easement abutting the property, or the use of any liquid waste storage, disposal or treatment methods (excluding public sanitary sewers and stormwater disposal methods) for any nonresidential land use which exceeds the maximum allowable sewage loading permitted by Section 24-43.1(4)(b) of this Code, shall cease within six (6) months from the date that the Director or the Director's designee determines that an approved public gravity sanitary sewer has been made available and operative in any portion of the public right-of-way or easement abutting the property. Thereafter, all liquid wastes that are generated, handled, disposed of, discharged or stored on the property shall be discharged to an approved and operative gravity sanitary sewer except those liquid wastes, other than domestic sewage, that are permitted by this chapter to be generated, handled, treated or stored on the property.

(9) Interim sewage treatment plants which serve any property within one-quarter (1/4) mile from a public sanitary sewer which ultimately discharges to a regional sewage treatment plant of the Miami-Dade Water and Sewer Department shall cease operation when the aforesaid public sanitary sewer is made operable and available. The sewage flowing to the aforesaid interim sewage treatment plants shall be diverted and transmitted to public sanitary sewers for ultimate discharge to a regional sewage treatment plant of the Miami-Dade Water and Sewer Department. Private interim sewage treatment plants shall cease to operate within six (6) months from the date the said public sanitary sewer is made operable and available. Public interim sewage treatment plants operated by a utility shall cease to operate within two (2) years from the date the said public sanitary sewer is made operable and available. The aforesaid one-quarter (1/4) mile

distance shall be measured from the closest point of any of the properties served by the aforesaid interim sewage treatment plants and the nearest available point of connection within a public right of way or public easement to the aforesaid public sanitary sewer.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 06-125, § 4, 9-12-06; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-43.2. Regulation of on-site domestic well systems and other water supply wells.

(1) *Regulation of on-site domestic well systems generally.*

- (a) Notwithstanding any provision of this Code, no County or municipal officer, agent, employee or Board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), platting action (final plat, waiver of plat or equivalent municipal platting action) or zoning action (district boundary change, unusual use, use variance or equivalent municipal zoning action) for any land use served or to be served by an on-site domestic well system without obtaining the prior written approval of the Director or the Director's designee.

Furthermore, notwithstanding any provision of this Code, no person shall construct, utilize, operate, occupy or cause, allow, let, permit or suffer to be constructed, utilized, operated or occupied any land use served or to be served by a domestic well system without obtaining the prior written approval of the Director or of the Department of Environmental Resources Management designee.

Pursuant to the foregoing, the Director or the Director's designee shall issue his written approval only if the Director or the Director's designee determines that:

- (i) That the existing land use for the property or the land use requested

for the property is in compliance with Section 24-43.1 of this chapter, and

- (ii) That the installation of a public water main to serve the property from the nearest available point of connection to an available public water main is not within a feasible distance for public water mains, and
- (iii) That the groundwater at the site does not require treatment in order to meet the primary drinking water quality standards specified in Chapter 62-55, Florida Administrative Code, as same may be amended from time to time, and
- (iv) That the groundwater at the site does not contain more than two hundred fifty (250) milligrams per liter (mg/l) of chlorides at a depth of thirty (30) feet from ground elevation.
- (b) No construction may be begun on any project within Miami-Dade County involving the construction of a well capable of withdrawing water without obtaining approval from the Director. No well that withdraws water in excess of five thousand (5,000) gallons per day from groundwater, surface water or any other water or waters of Miami-Dade County may be maintained or operated without a permit. All permit applications shall be filed with the Director on forms provided by the Director and shall include but shall not be limited to the following information:
- (i) The name and address of the applicant (if the applicant is a corporation include the address of the principal business office);
- (ii) The date the application is filed;
- (iii) The source of water supply (if the water is from a lake, spring, river, stream or other source of surface water the name generally given to the source by the people in the vicinity. If the water is from a groundwater source this fact shall be stated on the application);

- (iv) The quantity of water applied for;
 - (v) The use to be made of the water and any limitation thereon (the description shall include the nature of the proposed use, the method of withdrawal or division of the water and facts, figures and other information on which the amount of water requested was based);
 - (vi) The place where the water is to be used;
 - (vii) The location of the well and for surface waters, the point of diversion;
 - (viii) The total related land area owned by the applicant;
 - (ix) The necessity for the well;
 - (x) Any known persons who may be directly affected by the granting of the application;
 - (xi) The signature of the applicant or his agent (if the signer is signing in a representative capacity he shall attach proof of his authority—in the case of a corporation, governmental body or public utility the applicant shall attach a certified copy of the authority under which the application is made);
 - (xii) Other information as may be requested by the Department.
- (b) In determining whether a use is consistent with the public interest, the Director may consider the following factors:
 - (i) The maximum economic development of the water resources consistent with present and future uses;
 - (ii) The control of such waters for such purposes as environmental protection, drainage, flood control and water storage;
 - (iii) The quantity of water available for application to a reasonable-beneficial use;
 - (iv) Preservation of wasteful, uneconomic, impractical or unreasonable uses of water resources;
 - (v) The preservation and enhancement of water quality of the County and the provisions of the water quality standards and classifications established pursuant to Chapter 24 of the Code of Miami-Dade County;
 - (vi) The County's water resources policy as expressed in Chapter 24 of the Code;
 - (vii) The availability and proximity of public water supply; and
 - (viii) The satisfaction of the requirements of Section 24-43.3 of the Code.

(2) *Conditions for a well permit.*

- (a) In order to obtain a well permit an applicant must show that the intended use:
 - (i) Is a reasonable, beneficial use, and
 - (ii) Will not interfere with any legal use of water existing at the time of the application, including both exempted domestic uses and uses exercised under the authority of a valid permit, and
 - (iii) Is consistent with the public interest.
- (c) The Director may reserve water from use by permit applicants in such locations and quantities and for such seasons of the year as may reasonably be necessary to protect the public health, safety or fish and wildlife. Such reservations shall be subject to periodic review and revision in light of changed conditions except that all legal uses of water existing at the time of the reservation shall not be subject to this regulation so long as such uses are not contrary to the public interest. Any applicant aggrieved by an action of the Director or the Director's designee may appeal to the Environmental Quality Control Board under the procedures and standards set forth in Section 24-11 of the Code.

(3) *Permits for existing uses.* All uses of water in existence before the effective date of this section, unless otherwise exempted from regulation by law, may be continued after the adoption of this permit system. A permit for any existing use shall be issued upon proper application. Failure to apply for a permit for any existing use for one (1) year after the effective date of this ordinance shall constitute an abandonment of the right granted by this section.

Notwithstanding the above, when an approved public water main has been made available and operative in any portion of the public right-of-way or easement abutting the property, the use of any on site domestic well system shall cease and connection shall be made to a public water main within ninety (90) days from the date that the Director or the Director's designee determines that the approved public water main is made available and operative, and

- (a) The existing sewage loading on the property exceeds the maximum allowable sewage loading permitted by Sections 24-43.1(3) or 24-43.1(4)(b) of this Code, or
- (b) The groundwater quality for the property exceeds the potable water standards in Section 24-43.3(2) of this chapter.

(4) *Competing applications.*

- (a) If two (2) or more applications, otherwise in compliance with the provisions of this chapter, are pending for a quantity of water that is inadequate for both (or all) or which for any other reason are in conflict, the Director shall have the right to modify or approve the application or applications to best serve the public interest. In considering the relative benefit to be derived by the public from such proposed uses of water the Director may within the same type of use and source consider the following:
 - (i) Public users should be preferred over private users;
 - (ii) Economically more productive uses should be preferred over less productive uses;

(iii) The purposes expressly declared to be in the public interest in Chapter 24 of the Code should be given primary consideration.

(b) In the event two (2) or more competing applications which have equally qualified under Section 24-43.2(4)(a) above cannot be reconciled by modification by the Director, the Director shall give preference to:

- (i) Renewal application, or
- (ii) If none or all are renewal applications, to the first properly filed application.

(5) *Modification, renewal and transfer of permits.* A permittee may apply to the Director for approval of any modification of a permit use. The Director may approve any modification of use which involves a decrease in the quantity of water required. Modification of any other term or terms of a permit may be granted at the discretion of the Director provided that such modification does not effect substantially the public interest.

(6) *Revocation of permits.*

- (a) Pursuant to a hearing, the Environmental Quality Control Board may upon application by the Director:
 - (i) Revoke any permit for complete nonuse of water supply allowed by the permit for a period of one (1) year or more;
 - (ii) Permanently revoke in whole or in part any permit for any material false statement in the application to continue, to initiate, or to modify a use, or for any material false statement in any report or statement of fact required by the user pursuant to the provisions of this section;
 - (iii) Permanently or temporarily revoke in whole or in part any permit for the willful violation of conditions of the permit;
 - (iv) Revoke in whole or in part for a period not to exceed one (1) year any

permit for the violation of any provision of Chapter 24 or regulation adopted thereunder;

(v) Revoke, in whole or in part, any permit where adequate public water becomes available.

(b) The Director may cancel any permit with the written consent of the permittee.

(7) *Emergency drought conditions.* Nothing in this section shall be construed to prohibit the exercise of emergency powers to control the use, withdrawal or diversion of water during periods of emergency water shortage.

(8) *Violation of section.* It shall be unlawful for any person without a permit to construct, operate or maintain a well as required by this section.

(9) *Effect of denial.* When an application for a permit has been denied by the Director and that denial, pursuant to a timely appeal, has not been overruled by the Environmental Quality Control Board a new application for a permit shall not be resubmitted within one (1) year of such final denial unless the applicant can demonstrate a substantial change in conditions or unless the permit applied for is substantially modified and is in compliance with the Director's reason for denial.

(10) *Definitions.*

(a) *Domestic use* shall mean any use of water for individual personal needs or for household purposes such as drinking, bathing, eating, cooking or sanitation.

(b) *Emergency* shall mean that situation where the public health, safety or welfare or the health of animals, fish or aquatic life or of a public water supply or recreational, commercial, industrial, agricultural or other reasonable use of water is immediately in danger or threatened by an insufficient supply, restricted source, deleterious quality or other conditions of the water within the County.

(c) *Director* shall mean the Director of the Department of Environmental Resources Management with powers as provided by Section 24-7 of the Code.

(d) *Groundwater* shall mean water beneath the surface of the ground whether or not flowing through known and definite channels.

(e) *Person* shall mean any and all persons including but not limited to any individual, firm, association, organization, partnership, business trust, corporation, company, United States of America, the State of Florida and all the municipalities and public agencies thereof located within Miami-Dade County.

(f) *Reasonable-beneficial use* shall mean the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest.

(g) *Surface water* shall mean water upon the surface of the earth whether contained in bounds created naturally or artificially or diffused. Water from a natural spring or well shall be classified as surface water when it exits from the spring or well onto the earth's surface.

(h) *Water or waters of the County* shall mean any and all waters on or beneath the surface of the ground including natural or artificial water courses, lakes, ponds or diffused surface water and water percolating, standing or flowing beneath the surface of the ground as well as all coastal waters in the geographic boundaries of Miami-Dade County, Florida.

(i) *Water shortage* shall mean that situation within all or part of Miami-Dade County, Florida wherein insufficient water is available to meet the requirements of the permit system or where the conditions are such as to require temporary reduction in the total use within the area to protect water resources from serious harm.

(j) *Well* shall mean any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of such excavation is for the location, acquisition, development or arti-

ficial recharge of groundwater or removal of water from beneath the ground. The term well does not include sandpoint wells or any wells for the purpose of obtaining or prospecting for oil, natural gas, minerals or products of mining or quarrying or the inserting of media to dispose of oil brinds or to repressure an oil or natural gas-bearing formation or for storing petroleum, natural gas or other products.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

Sec. 24-43.3. Potable water standards.

(1) GENERAL PROHIBITIONS. It shall be unlawful for any person, firm, corporation, private or public utility, to cause, permit or otherwise allow any potable water supply to breach the values set forth in Section 24-43.3(2).

(2) POTABLE WATER STANDARDS FOR MIAMI-DADE COUNTY.

(a) Bacteriological quality; sampling. Compliance with the bacteriological requirements of these standards shall be based on examinations of samples collected at representative points throughout the distribution system. The frequency of sampling and the location of sampling points shall be established by the Director or the Director's designee after investigation of the source, method of treatment, and protection of the water concerned. In no event shall the frequency be less than as set forth below:

<i>Populations Served</i>	<i>Minimum Number of Samples Per Month</i>
25—2,500	2
2,501—3,300	3
3,301—4,100	4
4,101—4,900	5
4,901—5,800	6
5,801—6,700	7
6,701—7,600	8
7,601—8,500	9
8,501—9,400	10
9,401—10,300	11
10,301—11,100	12

<i>Populations Served</i>	<i>Minimum Number of Samples Per Month</i>
11,101—12,000	13
12,001—12,900	14
12,901—13,700	15
13,701—14,600	16
14,601—15,500	17
15,501—16,300	18
16,301—17,200	19
17,201—18,100	20
18,101—18,900	21
18,901—19,800	22
19,801—20,700	23
20,701—21,500	24
21,501—22,300	25
22,301—23,200	26
23,201—24,000	27
24,001—24,900	28
24,901—25,000	29
25,001—28,000	30
28,001—33,000	35
33,001—37,000	40
37,001—41,000	45
41,001—46,000	50
46,001—50,000	55
50,001—54,000	60
54,001—59,000	65
59,001—64,000	70
64,001—70,000	75
70,001—76,000	80
76,001—83,000	85
83,001—90,000	90
90,001—96,000	95
96,001—111,000	100
111,001—130,000	110
130,001—160,000	120
160,001—190,000	130
190,001—220,000	140
220,001—250,000	150
250,001—290,000	160
290,001—320,000	170
320,001—360,000	180
360,001—410,000	190
410,001—450,000	200
450,001—500,000	210
500,001—550,000	220
550,001—600,000	230
600,001—660,000	240
660,001—720,000	250

<i>Populations Served</i>	<i>Minimum Number of Samples Per Month</i>
720,001—780,000	260
780,001—840,000	270
840,001—910,000	280
910,001—970,000	290
970,001—1,050,000	300
1,050,001—1,140,000	310
1,140,001—1,230,000	320
1,230,001—1,320,000	330
1,320,001—1,420,000	340
1,420,001—1,520,000	350
1,520,001—1,630,000	360
1,630,001—1,730,000	370
1,730,001—1,850,000	380
1,850,001—1,970,000	390
1,970,001—2,060,000	400
2,060,001—2,270,000	410
2,270,001—2,510,000	420
2,510,001—2,750,000	430
2,750,001—3,020,000	440
3,020,001—3,320,000	450
3,320,001—3,620,000	460
3,620,001—3,960,000	470
3,960,001—4,310,000	480
4,310,001—4,690,000	490
4,690,001—	500

(b) Laboratories in which water examinations are made for required reports shall be subject to inspection at any time by the Director or the Director's designee.

(c) Bacterial limits. The presence of organisms of the coliform group as indicated by samples examined shall not exceed the following limits:

- (i) When ten (10) ml standard portions are examined not more than ten (10) percent in any month shall show the presence of the coliform group. The presence of the coliform group in three (3) or more ten (10) ml portions of a standard sample shall not be allowable if this occurs:
 - 1. In two (2) consecutive samples;
 - 2. In more than one (1) sample per month when less than twenty (20) are examined per month; or

- 3. In more than five (5) percent of the samples when twenty (20) or more are examined per month.

When organisms of the coliform group occur in three (3) or more of the ten (10) ml portions of a single standard sample, daily samples from the same sampling point shall be collected promptly and examined until the results obtained from at least two (2) consecutive samples show the water to be of satisfactory quality.

- (ii) When one hundred (100) ml standard portions are examined, not more than sixty (60) percent in any month shall show the presence of the coliform group. The presence of the coliform group in all five (5) of the one hundred (100) ml portions of a standard sample shall not be allowable if this occurs:

- 1. In two (2) consecutive samples;
- 2. In more than one (1) sample per month when less than five (5) are examined per month; or
- 3. In more than twenty (20) percent of the samples when five (5) or more are examined per month.

When organisms of the coliform group occur in all five (5) of the one hundred (100) ml portions of a single standard sample, daily samples from the same sampling point shall be collected promptly and examined until the results obtained from at least two (2) consecutive samples show the water to be of satisfactory quality.

- (iii) When the membrane filter technique is used, the arithmetic mean coliform density of all standard samples examined per month shall not exceed one (1) per one hundred (100) ml. Coliform colonies per standard sample shall not exceed 3/50 ml, 4/100 ml, 7/200 ml, or 13/500 ml in:
 - 1. Two (2) consecutive samples;

2. More than one (1) standard sample when less than twenty (20) are examined per month; or
3. More than five (5) percent of the standard samples when twenty (20) or more are examined per month.

When coliform colonies in a single standard sample exceed the above values, daily samples from the same sampling point shall be collected promptly and examined until the results obtained from at least two (2) consecutive samples show the water to be of satisfactory quality.

- (d) Physical characteristics; sampling. The frequency and manner of sampling shall be determined by the Director or the Director's designee. Under normal circumstances the Director or the Director's designee may require that samples be collected one (1) or more times per week from representative points in the distribution system and examined for turbidity, color, threshold odor, and taste.
- (e) Physical limits. The water shall contain no impurity which would cause offense to the sense of sight, taste, or smell. Under general use, the following limits shall not be exceeded:
 - Turbidity—5 nephelometric turbidity units
 - Color—15 units
 - Threshold odor number—3
- (f) Chemical characteristics; sampling. The frequency and manner of sampling shall be determined by the Director or the Director's designee. Under normal circumstances, analyses for substances listed in Section 24-43.3(2)(h) need be made only annually. If, however, there is some presumption of unfitness because of the presence of undesirable elements, compounds, or materials, periodic determinations for the suspected toxicant or material shall be made more frequently and an exhaustive sanitary survey shall be made to

determine the source of the pollution. Where the concentration of a substance is not expected to increase in processing and distribution, available and acceptable source water analyses performed in accordance with standard methods may be used as evidence of compliance with these standards.

- (g) Chemical limits. The water shall not contain impurities in concentrations which may be hazardous to the health of the consumers. It should not be excessively corrosive to the water supply system. Substances used in its treatment shall not remain in the water in concentrations greater than required by good practice. Substances which may have deleterious physiological effect, or for which physiological effects are not known, shall not be introduced into the system in a manner which would permit them to reach the consumer. Each public water supply utility shall test the finished water produced by each of its water treatment plants on an annual basis for the materials identified as priority pollutants by the United States Environmental Protection Agency as set forth in Schedule A, attached hereto and made a part hereof [but not reproduced at length herein], and such other materials as may be designated by the Director or the Director's designee. Each of the other community water systems shall test the finished water produced by its water treatment system every third year for the aforesaid materials identified as priority pollutants by the United States Environmental Protection Agency, and such other materials as may be designated by the Director or the Director's designee. The first of the previously mentioned analyses shall be performed, and the results submitted to the Director or the Director's designee, no later than one hundred fifty (150) days after the effective date of Ordinance No. 84-41. Subsequent analyses shall be performed, and the results submitted to the Director or the Director's designee, no later than July first of the respective year.

Analyses conducted to determine compliance with this section shall be made in accordance with an analytical method acceptable to the Director or the Director's designee in accordance with Schedule A, attached hereto and made a part hereof, and at the detection limits achievable using the specific technique. The laboratory performing these tests shall have appropriate experience in these types of drinking water analyses and shall be certified by the State of Florida.

After submittal of the test results to the utilities and community water systems for their review and comments at a public workshop, the Director or the Director's designee shall make available to the public thirty (30) days thereafter an annual publication of the test results. Said publication shall contain the test results of all public water supply utilities and other community water systems in Miami-Dade County including comments regarding the test results by the utilities and community water systems.

(h) The following chemical substances shall not be present in a water supply in excess of the listed concentrations:

<i>Substance</i>	<i>Concentration in mg/l</i>
Arsenic (As)	0.01
Chloride (Cl)	250
Copper (Cu)	1.0
Cyanide (Cn)	0.01
Iron (Fe)	0.3
Manganese (Mn)	0.05
Methylene Blue Active Substances (MBAS)	0.5
Nitrate Nitrogen (NO ₃ -N)	10
Phenols	0.001
Sulphate (SO ₄)	250
Total dissolved solids	500
Zinc (Zn)	5

(i) The presence of the following substances in excess of the concentrations listed shall constitute grounds for rejection of raw water supply:

<i>Substance</i>	<i>Concentration in mg/l</i>
Arsenic (As)	0.05
Barium (Ba)	1.0
Cadmium (Cd)	0.01
Chromium (hexavalent) (CR VI)	0.05
Cyanide (Cn)	0.2
Lead (Pb)	0.05
Selenium (Se)	0.01
Silver (Ag)	0.05
Mercury (Hg)	0.002
Nitrate (as N)	45

(j) Analytical methods. Analytical methods to determine compliance with the requirements of these standards shall be those specified in Standard Methods for the Examination of Water and Waste Water, sixteenth edition.

(k) All public water supply systems shall employ an approved method of disinfection acceptable to the Director or the Director's designee. Such disinfection shall be accomplished continuously in such a manner as to assure the continued feeding of the disinfection agent.

(i) Those systems utilizing gas chlorine shall provide duplex systems that will assure the continued application of chlorine to the water even as containers are expended and replaced;

(ii) Those systems utilizing chlorine shall maintain a minimum three-tenths (0.3) milligrams per liter as free chlorine throughout its distribution system. In no case shall a chlorine residual in excess of two (2.0) milligrams per liter be maintained in the distribution system;

(iii) Utilization of other methods of disinfection acceptable to the Director or the Director's designee shall have established limits set by the Director;

(iv) The minimum amount of chlorine to be stored at the water treatment facility or immediately accessible to the facility shall be a thirty-day sup-

ply. In lieu of this requirement the utility may provide to the Director or the Director's designee copies of long term contracts indicating available quantity together with transportation contracts;

- (v) All public water supply systems shall provide to the Director or the Director's designee breakpoint chlorination curves for:
 1. All individual wells which are used as a supply of raw water;
 2. Composite breakpoint curves for the raw water supply used for average and maximum day demand.

(l) Every public water supply shall install a suitable measuring device at each source of supply and at the point that water is pumped to the distribution system in order that a record may be maintained of the water produced and treated. The quantities indicated by these measuring devices shall be tabulated daily and recorded.

(m) When the annual average of the maximum daily air temperatures for the location in which the public water system is situated is the following, the corresponding concentration of fluoride shall not be exceeded:

<i>Temperature (in degrees F)</i>	<i>(Degrees C)</i>	<i>Level (mg/l)</i>
50.0—53.7	10.0—12.0	1.8
53.8—58.3	12.1—14.6	1.7
58.4—63.8	14.7—17.6	1.5
63.9—70.6	17.7—21.4	1.4
70.7—79.2	21.5—26.2	1.2
79.3—90.5	26.3—32.5	1.1

(n) Public water supply systems cleaning and disinfection. No person, Board, or municipality charged with the management or control of a public water supply shall put into service any new plant, pumping station, main, standpipe, reservoir, tank, or other pipe or structure through which water is delivered to consumers for pota-

ble or household purposes, nor resume the use of any such structure, facilities, or main after it has been cleaned, until such structure, facilities or main has been effectively sterilized or disinfected. Provided, that this may not necessarily apply to mains, reservoirs, tanks, or other structures, the waters from which are subsequently treated or purified.

(o) Adequate pressure shall be maintained in the mains to deliver the water for which they were designed, whether it be for fire, industrial, or domestic use. In no event, however, shall the pressure at the point of delivery to any customer fall below twenty (20) pounds per square inch, nor shall the static pressure exceed one hundred (100) pounds per square inch.

(p) By-passing unlawful. Where a potable water treatment facility has been provided, it shall be unlawful to by-pass the facility or any part thereof. In the event of an emergency, the supplier may temporarily utilize a by-pass. However, it shall be unlawful to fail to immediately notify the Director or the Director's designee of such an emergency. Such notification shall not be a defense to any civil liability under this chapter.

(q) When an approved public water main is made available and operative in a public right-of-way or easement abutting the property, any existing individual potable water supply system, device, or equipment shall, within ninety (90) days, be abandoned and the source of potable water for the residence or building shall be from the approved public water supply main.

(r) Public water supply systems; cross-connections and use of dual supplies.

(i) Certain cross-connections prohibited. No officers, Board, corporation, municipality or other persons having the management of a public water supply shall permit any physical connection between the distribution system of such supply and that of any other water supply unless such

other supply is regularly examined as to its quality by those in charge of the public supply to which the connection is made and is also found to be safe and potable. This provision shall apply to all water distribution systems either inside or outside of any building or buildings.

- (ii) Permissible arrangement where dual supplies are used. If a potable water supply is used as an auxiliary supply delivered to an elevated tank, or to a suction tank, which tank is also supplied with water from a source with which cross-connections are not permitted by Section 24-43.3(2)(r)(i), such tank shall be opened to atmospheric pressure and the potable water supply shall be discharged at an elevation above the high water line of the tank.
- (s) Facilities in actual use and operation as of the date of the enactment of this section which exceed the criteria set forth in any of the provisions of Section 24-43.3 hereof, certified by a competent state or county agency as a present or potential health hazard, shall be designated by the Director as priority public water supply areas. Upon such designation the Miami-Dade County Water and Sewer Department and the County Manager shall initiate proceedings for the creation of a special taxing district for public water system for the elimination of the potable water wells therein or take such other commensurate steps as to assure the elimination of the potable water wells therein, on a timely basis.
- (t) All treatment facilities shall be designed to have a treatment capacity equal to maximum day demand.
- (u) Any cross-connections in the treatment facility or distribution system are to be eliminated upon direction of the Director, Environmental Resources Management. In the event such a cross-connection is maintained by a user after an order to disconnect is given by the Director or the Director's designee, the Director or the Director's designee may order the discontinuance of service by the utility to the user until the cross-connection is eliminated.
- (v) No water supply well shall be constructed or used until a written approval from the Director or the Director's designee has been received by the owner and/or driller of the well:
 - (i) The Director or the Director's designee shall be notified by the well driller at least twenty-four (24) hours prior to initiating construction of a permitted well;
 - (ii) In wells where the casing is driven it shall be known as drive pipe, and shall be equipped with couplings allowing for butt joints between lengths of casing. For wells in which the casing is not driven "merchant casing," standard pipes or pipe especially constructed for gravel wall wells will be acceptable;
 - (iii) Where telescoped casing is utilized, an approved watertight seal shall be made where increases or reductions occur in casing size. The initial stage of the telescope casing shall extend a minimum of thirty (30) feet into the groundwater table;
 - (iv) When water is to be obtained from limestone strata, the casing shall extend sufficiently far into unbroken limestone to be seated firmly in it but in no case shall it be less than thirty (30) feet into the aquifer;
 - (v) Wells drilled by the rotary method shall have an annular space sealed by the use of a neat cement grout at the bottom of the hole and to the surface by neat cement or other approved material;
 - (vi) Once the construction of the well is completed it shall be protected at all

- times to prevent entrance of contaminating material until such time as the pump may be placed;
- (vii) The top of the casing shall be so constructed as to exclude any influent but shall not extend less than one (1) foot above the surface of the ground;
 - (viii) A concrete pad shall be constructed around the well a minimum of twelve (12) inches thick, two (2) feet horizontal from the casing;
 - (ix) Pump houses or pump pits shall be constructed so as to provide for positive drainage. Where such is not possible, sump pumps or an alternative acceptable to the Director or the Director's designee shall be provided. Such systems shall be installed as duplex systems;
 - (x) Where provided, well vents shall be adequately protected;
 - (xi) In those situations where suction lines from a well casing are indicated, the suction pipe shall be so constructed to prohibit inundation. Minimum requirement shall be twelve (12) inches of clearance between the invert and ground surface;
 - (xii) A sampling tap shall be provided on the discharge of the well pump piping or in such a location as to assure a true raw water sample;
 - (xiii) The use of dynamite for the construction of wells shall be prohibited;
 - (xiv) Dug wells, infiltration galleries and other sources of water supply requiring rearrangement of natural features are hereby prohibited as a source of public water supply;
 - (xv) The use of surface water as a raw water source is prohibited;
 - (xvi) All wells shall be located on terrain not subject to ponding or flooding. Furthermore, the slope of the ground surface in the vicinity of the well(s) shall be away from the well. In level areas, well compacted earth shall be placed around the well so as to elevate the platform, pad or apron;
 - (xvii) As far as is practical, wells shall be located on the upstream side of possible sources of pollution;
 - (xviii) The minimum separation between a well or wells and possible sources of contamination shall be a function of the drawdown and radius of influence of the well or wells. It shall be the responsibility of the design engineer to present data showing the radius of influence and drawdown together with a sanitary survey of the area influenced by the well. Such a survey shall extend one-half ($\frac{1}{2}$) mile beyond the radius of influence of the well field. In the cases involving multiple wells the interference among wells shall be determined. It shall be the design engineer's responsibility to show that the top thirty (30) feet of the aquifer is not tapped by the well(s). In no case shall the well be located less than one hundred (100) horizontal feet from any source of contamination. However, the Director or the Director's designee shall have the power to require additional spacing when conditions justify;
 - (xix) All wells shall be accessible for such attention as necessary;
 - (xx) All wells shall be equipped with an opening suitable for introduction of a disinfecting agent and measurement of drawdown and static water level;
 - (xxi) When using chlorine as a disinfecting agent, a quantity, at least equal to the volume of the casing, of a strength of fifty (50) milligrams per liter shall be injected into the well. The solution shall be permitted to stand a minimum of twenty-four (24)

hours and then pumped out for a sufficient length of time to remove the disinfecting agent;

- (xxii) Once the well has been evacuated in accordance with subsection (21), a series of twenty (20) or more daily samples, twenty (20) series, shall be collected and submitted to the Division of Health laboratory, the well being pumped for a minimum of thirty (30) minutes each day at its proposed capacity just prior to collecting the samples. At the discretion of the Director or the Director's designee the samples may be reduced to duplicate daily samples for a minimum of ten (10) days. Such samples will necessitate pumping for a minimum of thirty (30) minutes as indicated above;

- (xxiii) Interpretation of the laboratory results in the well survey will be made in accordance with applicable parts of the water supply standards;

- (xxiv) Once the series of twenty (20) or more consecutive satisfactory samples have been collected a complete analysis shall be performed of the raw water for both physical and chemical characteristics of the complete analysis shall be furnished to the Director or the Director's designee.

(Ord. No. 04-214, §§ 1, 5, 12-2-04; Ord. No. 08-55, § 2, 5-6-08)

DIVISION 3. CONTAMINATED SITE CLEANUPS

Sec. 24-44. Clean-up Target Levels (CTLs) and Procedures for Site Rehabilitation Actions (SRAs).

(1) STATE PROGRAM CONTAMINANT CLEAN-UP TARGET LEVELS (CTLs) AND PROCEDURES.

- (a) For contaminants subject to Chapter 62-770, F.A.C., the CTLs and SRA proce-

dures set forth in Chapter 62-777 and 62-770, Florida Administrative Code (F.A.C.) shall apply.

- (b) For sites which have entered into a Brownfields Site Rehabilitation Agreement with the Department or the Florida Department of Environmental Protection pursuant to Chapter 62-785, F.A.C., the CTLs and SRA procedures set forth in Chapter 62-777 and 62-785, F.A.C. shall apply.
- (c) For contaminants subject to Chapter 62-782, F.A.C., the CTLs and SRA procedures set forth in Chapter 62-777 and 62-782, F.A.C. shall apply.
- (d) For lands owned by the state university system, the risk-based clean-up criteria as described in 376.3071, 376.3078, and 376.81, Florida Statutes, shall apply.

(2) CLEAN-UP TARGET LEVELS (CTLs) AND PROCEDURES FOR SITES OR CONTAMINANTS OTHER THAN THOSE IDENTIFIED IN SECTION 24-44(1).

- (a) Intent. To protect human health, public safety and environmental resources using risk-based corrective action strategies and to establish the point at which a site rehabilitation action is determined to be accomplished.
- (b) The acceptable level of protection for the establishment of human health based CTLs shall be a lifetime excess cancer risk level of one in one million (1.0E-06) and a hazard quotient of one (1) or less. In addition, the CTLs shall be established to protect aquatic life and to prevent nuisance conditions as applicable.

- (c) Applicability. The CTLs set forth in this section are not effluent standards and are not for the purpose of disposal or reuse.

The CTLs and SRA procedures set forth in this section shall not apply to those contaminants that are subject to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, the Re-